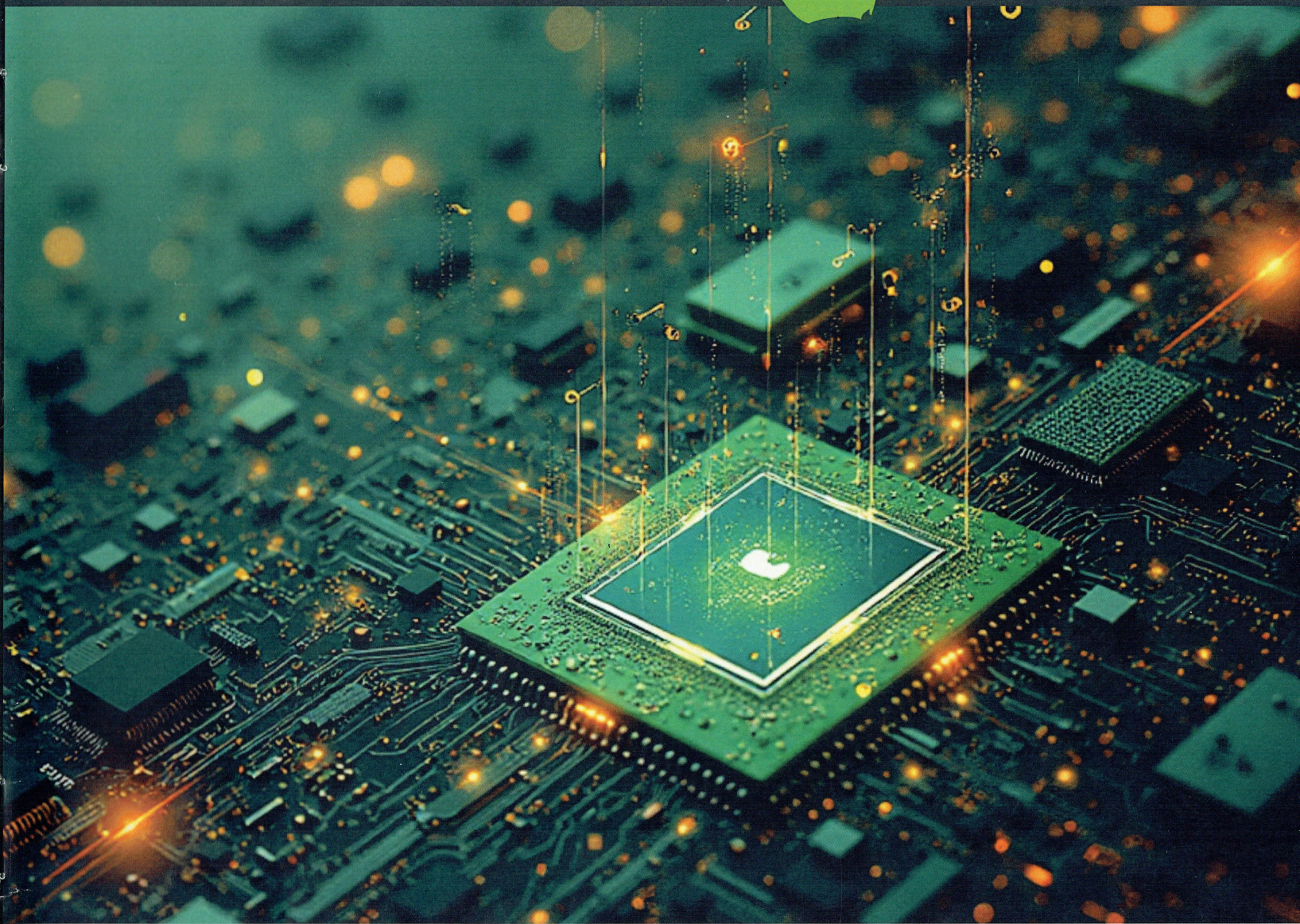


PCB Carolina 2025

SHOW GUIDE

pcbcarolina.com



November 12, 2025

McKimmon Center, NC State University

Presented by:

better boards



PCB Carolina 2025 - NC State McKimmon Center - November 12th

7:30 to 8:30	8:30 to 9:30	9:30 to 10:30	10:30 to 11:00	11:00 to 12:00	12:00 to 2:00	2:00 to 3:00	3:00 to 3:30	3:30 to 4:30	4:30 to 5:00	5:00 to 6:00
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Attendee Check In

Breakfast - 7:30 to 9:30	Lunch - 11:30 to 1:30	Reception
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Keynote Address Room 2 at 8:20	Exhibit Floor Open
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Tech Session A					Tech Session B		Tech Session C		Tech Session D	
Room 3 cadence	3A Beyond Automation: The Future of PCB Design in the Age of Agentic AI Patrick Davis	3B AI-Powered PCB Workflows: Accelerating Designs from Schematic to Post-Process Supreeth Mannava	Keynote Address Room 2 at 8:20 From Automation to Autonomy: AI's Evolving Role in Printed Circuit Board Design Jerry Suiter See abstract on page 2.			3C Smarter Workflows: Combining AI-Driven PCB Design with In-Design Analysis Michael Alexander	3D The Future of PCB Design: Allegro X Platform Innovations for 2025 Mike Catrambone			
	Room 4	4A Optimizing Engineering to Manufacturing Efficiencies Stephen Chavez				4B Understanding the CE Mark for Products Sold into the European Union Bill Bisenius	4C Dry Circuits, Wet World: How Polyene Coatings are Tested for Water Defense Alexander Niebrocki	4D Don't Let Heat Derail Your Design: Thermal Considerations Upfront in PCB Design Ryan Miller		
Room 5	5A FCT for RF/High Speed Applications with Test Probes: Strategies, Pitfalls and How to Avoid Those Matthias Zapatka	5B Optimizing Scale-Up and Scale-Out Data Center and AI System Topologies with Samtec CPX Interconnect Matthew Burns	The abstracts for the Technical Sessions can be found on pages 12-19			5C Inside the Module: State-of-the-Art Advances in Computer-on-Module Technology Stone Shih	5D From Module to Market: A Practical Design-In Roadmap for Custom COM Carrier Boards Dr. Serchen Chang			
Room 6	6A Switch-Mode Power Supply Layout – Best Practices for PCBA Design Gerry Callahan	6B Electromagnetics for the Working Engineer Dr. Bruce Archambeault				6C Next-Generation Techniques in Electronic Failure Analysis Dr. Steve Crane	6D Advanced Materials and Process for HDI Designs Paul Cooke			
Room 9	Soldering Workshop 9:30 to 12:00				Soldering Workshop 2:00 to 4:30					

Welcome to PCB Carolina 2025

Better Boards, Inc. welcomes you to PCB Carolina 2025. This premier electronics tradeshow offers free access to breakfast with Keynote Address, over 100 vendor exhibits, 16 exciting Technical Presentations, a buffet lunch, and an evening reception. We are also offering 2 half-day Hands-On Soldering Workshops as a fee-based service through Circuit Technology, Inc.

This is the moment you've been anticipating for all year. It is time to network with your peers, begin new business relationships or rekindle old ones, increase your industry knowledge, learn about new technologies and meet suppliers.

The Keynote Address is from Jerry Suiter, Senior Systems Architect Director:
"From Automation to Autonomy: AI's Evolving Role in Printed Circuit Board Design". Check your show guide for Technical Presentation details.

Our community is fortunate to have access to such a fulfilling tradeshow with a wide selection of training opportunities. I encourage you to stay the entire day and take advantage of all we have worked so hard to bring our community. Access to all the exhibit spaces, the Keynote Address, 16 Technical Sessions, food, drinks and evening reception with more food, beer and wine is 100% free to all attendees.

Your show guide includes an alphabetical listing as well as a summary of each exhibiting company and descriptions of the Keynote Address, Technical Presentations and Soldering Workshops. Pick up your complimentary t-shirt, tote bag and an event pen. If you chose "Opt In" for the door prize drawing when you checked-in, you are eligible to win a door prize. Door Prizes are drawn throughout the day and posted to the large screens. You must be present to claim your prize. If a prize goes over 2 hours without being claimed, it gets recycled and redrawn so check the large screens often.

Today's show would not be possible without the endless hours donated by Better Boards, Inc and other volunteers.

Special thanks to Randy Faucette for his tireless effort.

Additional thanks to Steve Trasatto, Cheryl Olive, Debbie Johnson, Andy Whallen, Greg Beasley, Penny Langdon, Bill Donaldson and the volunteers from Wake Tech, and Gary Beasley, Cristy Holmes, and the volunteers from Central Carolina Community College.

We would like to thank all the exhibiting companies, the speakers, and most importantly our attendees.

Enjoy the show!

Tony Cosentino, Director of New Technologies and Quality
Better Boards, Inc.

1500 Town Side Dr, STE 301

Apex, NC 27502

www.betterboards.com

SIEMENS

From Automation to Autonomy: AI's Evolving Role in Printed Circuit Board Design

Abstract

The integration of artificial intelligence into printed circuit board (PCB) design offers significant potential to enhance productivity, address workforce shortages, and manage increasing design complexity. However, current AI technologies often lack the precision and repeatability required for critical engineering applications. While existing AI solutions face challenges in meeting rigorous validation requirements, emerging agentic AI systems present opportunities for cross-domain applications, including intelligent bridging of mechanical-electrical constraints, automated compliance verification, and multi-disciplinary design optimization. This keynote provides a balanced assessment of AI adoption in PCB design, advocating for strategic implementation that leverages current capabilities while preparing for next generation autonomous design agents.

Bio



Jerry Suiter, Senior Systems Architect Director

Jerry Suiter brings extensive expertise to his role, earning a Bachelor of Science in Engineering (BSE) specializing in Computer Engineering from the University of Central Florida. He commenced his professional journey in the Electronic Design Automation (EDA) industry in 1990 with Intergraph. For the past 35 years, Jerry has been a pivotal contributor at Siemens, where he is currently responsible for the comprehensive Siemens EDA electronics PCB design product portfolio, encompassing Xpedition Designer, IOPT, Constraint Manager, Xpedition Layout, Fablink & Drawing Editors, and Library Manager.

Beyond his product portfolio leadership, Jerry also leads the Modern User Experience for desktop products and spearheads the development of Artificial Intelligence and Machine Learning

(AI/ML) solutions integrated across these offerings. His groundbreaking work in AI systems for PCB Design is evidenced by multiple patents and has garnered significant recognition. Notably, he received the prestigious 2024 Siemens Digital Industries Invention of the Year award for his patent application on "Electronics AI Enriched Hierarchical Automated Placement," and the Siemens Digital Industries Inventors Award 2025 in the Digitalization and Industrial Metaverse category for the patent application covering innovative work on AI Circuit Group Placement.

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Visit us at booth #19



PCB Carolina 2025

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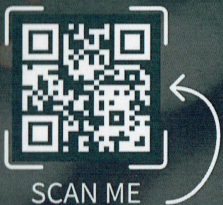


Get to the Good Parts

The Supply Chain Execution Platform

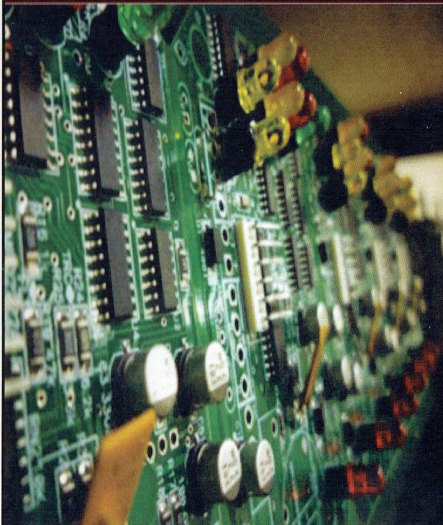
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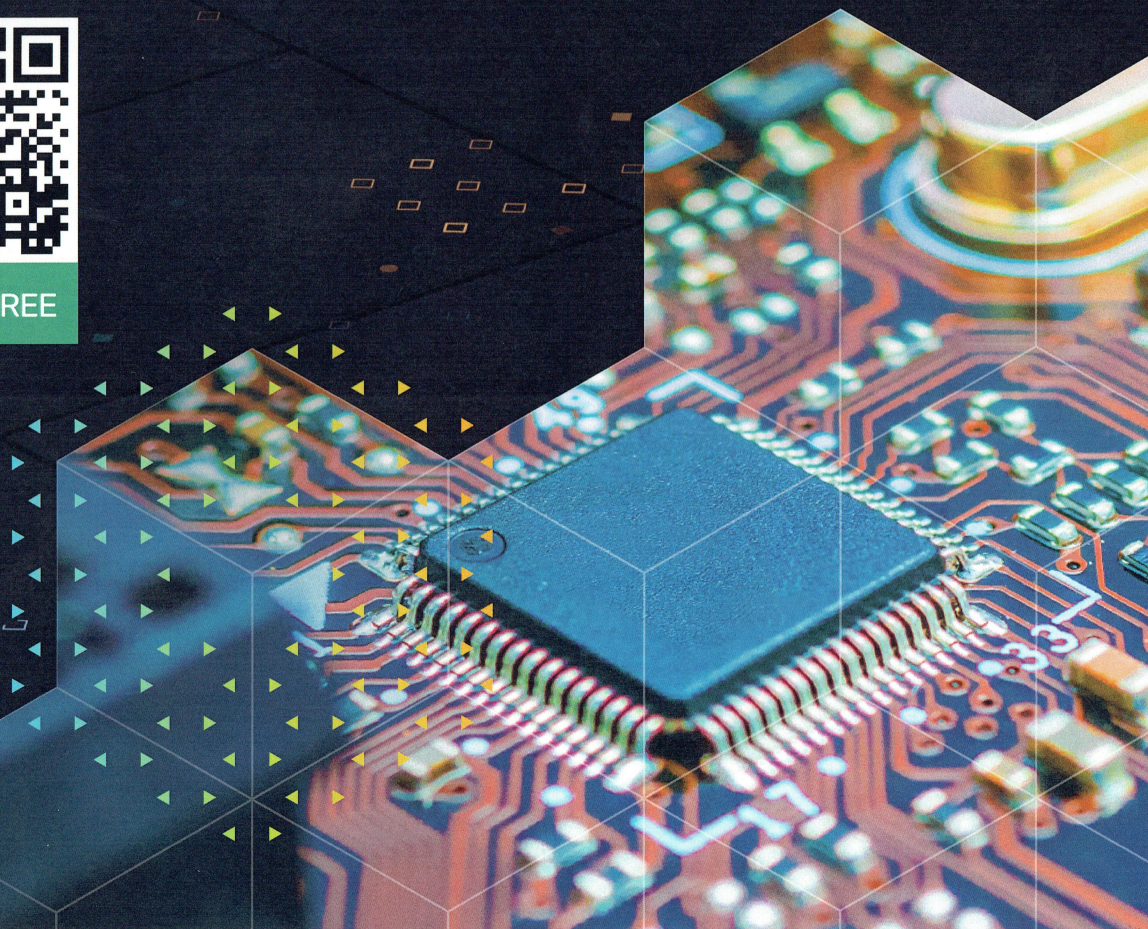
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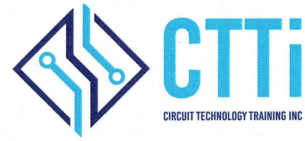


Agenda

TIME	ROOM	PRESENTATION
9:30am - 10:30	RM3	Beyond Automation: The future of PCB Design in the Age of Agentic AI <i>Patrick Davis</i>
11:00am - Noon	RM3	AI-Powered PCB Workflows: Accelerating Design from Schematic to Post-Process <i>Supreeth Mannava</i>
2:00pm - 3:00pm	RM3	Smarter Workflows: Combining AI-Driven PCB Design with In-Design Analysis <i>Michael Alexander</i>
3:30pm - 4:30pm	RM3	The Future of PCB Design: Allegro X Platform Innovations for 2025 <i>Mike Catrambone</i>

PCB Carolina Soldering Workshops

SOLDERING WORKSHOPS CONDUCTED BY:



**If you missed it this year,
make plans for next year!**
PCB Carolina - Nov. 11, 2026

PCB Carolina Hands-On Soldering Workshops

In accordance with IPC J-STD-001 and IPC-610



There are two workshops

Morning Workshop 9:30 am - 12:00 pm, Room 9

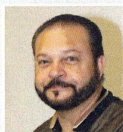
Afternoon Workshop 2:00 pm - 4:30 pm, Room 9

In each workshop, there will be 3 Modules:

Module 1 Basics of soldering covers solder, flux, solder pastes, reflow temperatures, rheology, component ID, ESD, MSL, solder tip care and familiarization with J-STD-001.

Module 2 SMT / TH soldering and Assembly covers surface mount soldering, through hole soldering.

Module 3 Inspection covers inspection to class 1, class 2, class 3 and familiarization to IPC-610 acceptability of electronic assemblies.



Instructor: Angel Deluna

Angel Deluna is an IPC Master Instructor with Circuit Technology Inc., a North Carolina Corporation. Angel has 30 years of experience in the electronics industry in various capacities. The last 10 years he has been training all over the world as an IPC Master Instructor.

These are the real deal workshops with all the tools and supplies you'll need: soldering stations with various tips, fluxes, solders and pastes, tools, cleaners and solvents, and microscopes. What a great opportunity to learn from Certified IPC Trainers. Get educated on how to properly solder, the dangers of ESD and moisture, and proper handling of electronic assemblies.



The Solder Training Authority.



Circuit Technology's IPC certified trainers have an average of 24 years experience in the circuit board assembly/manufacturing field.

We can assist with all your solder training needs.

Circuit Technology offers IPC certifications as well as custom designed solder training courses to meet your specific requirements. We offer solder training classes in IPC-600, IPC-610, IPC-620, IPC-7711, IPC-7721 and IPC-J-001.

There is also a very popular SMT Bootcamp course that covers the basics of the Circuit Board assembly process and is tailored to meet your specific needs. This course is great for new hires as well as seasoned employees that may have never been exposed to formal training in the SMT process.

CTI also offers specific classes in LED assembly/repair, lead-free, wave soldering and reflow or we will customize courses for specific needs. In addition, we offer consulting services in all areas of the electronic assembly, repair, rework, and modification processes.

CTI has training centers in North Carolina, Maryland, Florida, Massachusetts, California, Michigan, and Costa Rica as well as training on site at your location anywhere in the world.

To learn more about CTI call 919-552-3434 or visit www.circuittechnology.com



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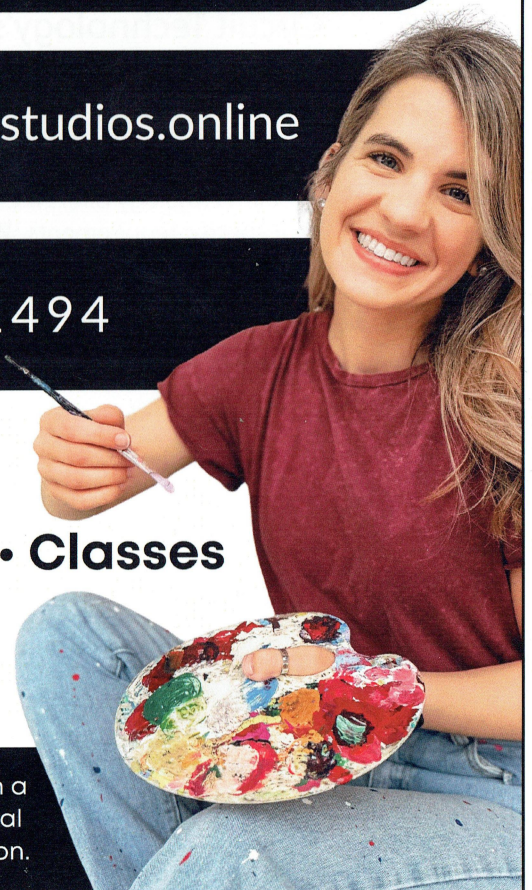
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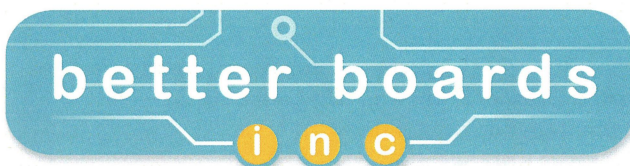
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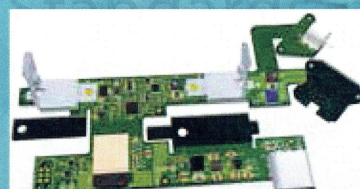
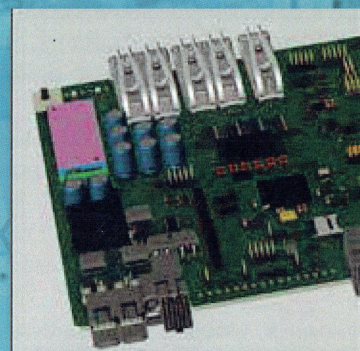
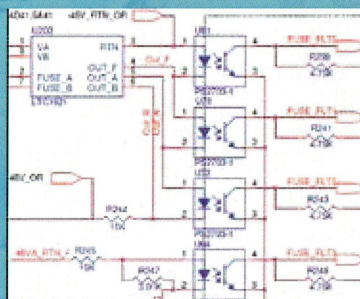
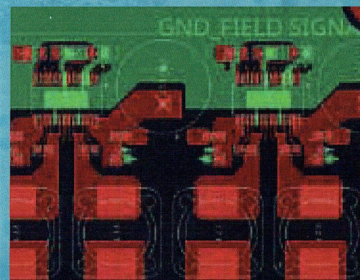
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Room 3 – 9:30 am to 10:30 am

Title: Beyond Automation: The Future of PCB Design in the Age of Agentic AI

Speaker: Patrick Davis, Director Product Management, Cadence

Abstract: Artificial Intelligence is no longer a distant concept—it's already reshaping how engineers approach PCB design. In this session, we'll explore the five levels of AI—optimization, conversational, complex reasoning, agentic, and full autonomy—and how each stage directly impacts PCB designers. Starting with today's tools that optimize layouts and enable conversational assistance, we'll move toward the near future where agentic AI systems collaborate with designers, anticipate challenges, and streamline decision-making. Looking further ahead, we'll discuss the promise and implications of full autonomy in design workflows. Attendees will gain practical insights into what's available today, what's coming tomorrow, and what may arrive next year or two, with a focus on how these advancements can reduce over-design, improve productivity, and enhance innovation. Whether you're curious about AI's role in your current design flow or preparing for a future of highly autonomous design agents, this talk will provide a roadmap for navigating the AI-driven transformation of PCB design.

Bio: Patrick Davis is the Product Management Director for Allegro at Cadence Design Systems. He is an industry expert with over 25 years' experience in the PCB design industry. Staring his career as a PCB designer and working his way up to Sr. Vice President of Design before pivoting to his new exciting role at Cadence Design Systems where he is helping define next generation of EDA tools for the engineering community.



Room 4 – 9:30 am to 10:30 am

Title: Optimizing Engineering to Manufacturing Efficiencies

Speaker: Stephen V. Chavez, Principal Technical Product Marketing Manager, Siemens

Abstract: Effective collaboration between designers and manufacturers is crucial for successful product development, particularly in the PCB industry. This abstract explores the critical relationship between design and manufacturing, emphasizing the importance of early-stage collaboration and Design for Manufacturing (DFM) implementation. This abstract highlights how PCB fabricators focus on transforming designs into physical boards that meet performance requirements, producibility standards, and economic constraints.

A key finding is that successful manufacturing outcomes depend on proactive DFM analysis throughout the design process, rather than reactive measures that can lead to costly iterations and delayed market entry. This abstract emphasizes the significance of comprehensive documentation, including detailed engineering drawings, manufacturing process instructions, and precise material specifications. Furthermore, the implementation of bi-directional feedback loops and early fabricator engagement has been shown to optimize the overall manufacturing process, leading to improved product quality and faster time to market.

In summary, this abstract offers a comprehensive perspective where the industry best practice methodology bridges the gap between engineering and manufacturing requires a systematic approach that incorporates clear communication channels, standardized guidelines, and continuous optimization of the design-to-manufacturing handoff process, leading to a manufacturing driven design. This integrated approach not only enhances product quality and reduces defects but also promotes sustainable manufacturing practices and supply chain resilience.

Bio: Stephen V. Chavez is a principal printed circuit engineer with over three decades of experience. He is acknowledged globally as an industry Subject Matter Expert (SME) in PCB design. His continued career evolution has elevated him to Industry Thought Leadership and as an Industry Influencer regarding printed circuit engineering. He is an author, podcast host and is currently a Principal Technical Product Marketing Manager with Siemens. He is one of the co-authors and instructors of the industry PCEA Training curriculum and certification (Certified Printed Circuit Designer (CPCD)) governed by PCEA. He continues to pave the way for the evolution of the printed circuit engineering professional within the industry. His focus is on continuous improvement for the PCB design profession by serving as Chairman of the Board for the PCEA. Stephen is a proud military veteran of United States Marine Corps, where he served five years as an avionic technician.



Room 5 – 9:30 am to 10:30 am

Title: FCT for RF/High Speed Applications with Test Probes. Strategies, Pitfalls and How to Avoid Those
Speaker: Matthias Zapatka - Senior Field Application Engineer, INGUN USA

Abstract: Our presentation at this year's PCB Carolina conference is about "merging" RF shielded enclosures with mechanical fixtures that are used for test of printed-circuit-board assemblies. We discuss the mechanical design of such a RF fixture "combination" and then take it a step further by demonstrating how such a fixture can be used for various tasks such as shielding the DUT from radiated emissions while allowing to access the PCBA with test probes. In an unshielded environment, this could create havoc as not all circuits may be properly EMI shielded when the unit undergoes a functional/production test. Of course, such a fixture also needs to be properly characterized to ensure there is enough shielding effectiveness for a signal to be properly attenuated. Several techniques are shown such as test in an anechoic chamber or a quick characterization with cost-effective handheld analyzers and signal generators. We'll have hands-on demo units on-site.

Bio: Matthias is the co-founder of INGUN USA, which is the North American subsidiary of the INGUN group with headquarters in Konstanz, Germany. His primary role is technical consultation and application engineering. Matthias has been in the test and measurement world for over 17 years and is a frequent speaker at manufacturing and test related conferences throughout the United States. Matthias' academic background is in RF and wireless communications. This is where he got interested in topics such as impedance matching, electromagnetic interference, compliance, shielding and other topics. Being an avid ham radio operator, Matthias is "radio-active" both during and after the workday.



Room 6 – 9:30 am to 10:30 am

Title: Switch-Mode Power Supply Layout – Best Practices for PCBA Design
Speaker: Gerry Callahan - Senior Electrical Engineer, U.S. Cargo Systems

Abstract: Today's Switch-Mode Power Supply (SMPS) circuits are fast and efficient. The speed is crucial to both size and efficiency, but that can make it difficult to pass agency tests such as FCC, while performing robustly in real-world conditions. In this session, you will: see why SMPS presents specific challenges for EMI (Electro-Magnetic Interference); learn how not to compromise between minimum EMI and maximum efficiency (who really wants to sacrifice either one?); and discuss common problems and how to avoid them. We will also see how this impacts agency testing (and how to pass the tests!), and discuss some recommended PCB stackups. There is a live demonstration, audience discussion is encouraged, and there will be time for questions and answers.

Bio: Gerry Callahan is a Senior Embedded Systems Engineer, with over 30 years of experience designing, programming, and testing electrical circuits and systems. Gerry has a BSEE from the University of Maryland, and has worked in a variety of defense and commercial settings for small and large companies. He also enjoys mountain hiking and zymurgy.



Room 3 – 11:00 am to 12:00 pm

Title: AI-Powered PCB Workflows: Accelerating Designs from Schematic to Post-Process

Speaker: Supreeth Mannava, Sr Principal Product Manager, Cadence

Abstract: Traditional PCB design can take weeks, requiring countless decisions at every stage—from schematic capture and BOM selection to layout and final post-processing. But what if AI could collapse this timeline? This session will showcase how AI-powered workflows and automation tools are transforming the way designers approach projects. By applying AI at each step—starting with intelligent schematic guidance, through BOM optimization, to layout acceleration and post-design validation—engineers can dramatically reduce design cycle times for straightforward boards. We'll explore real-world scenarios where AI agents and automation collaborate to eliminate repetitive tasks, surface better component decisions, and streamline routine processes. The result: designs that once took weeks can now be completed in days, freeing engineers to focus on innovation and complex problem-solving. Attendees will leave with a clear understanding of how to apply AI to accelerate their design flow today, and how these tools will continue to evolve to reshape PCB development in the near future..

Bio: Supreeth Mannava is a Sr. Principal Product Manager for PCB solutions at Cadence Design Systems. He received his Bachelor's Degree in Electrical Engineering from Rice University in 2015. He has 10 years of experience in the Electronic Design Automation (EDA) industry, helping customers ranging from small startups to large enterprise-level system design teams maximize their value and productivity with their PCB design solutions.



Room 4 – 11:00 am to 12:00 pm

Title: Understanding the CE Mark for Products Sold into the European Union

Speaker: William (Bill) Bisenius, Director of Technical Services, Eruofins CertifiGroup

Abstract: The European Union presents the 2nd largest market in the world, with nearly as much buying power as the United States. Which makes it a very attractive market for product manufacturers.

But what does it take to import & sell your product in the European Union? It takes the CE Mark. And how do you get the CE Mark?

This presentation will explain the European CE Mark requirements and give the attendee an understanding of what it takes to put the CE Mark on their product. No matter what type of product made/sold, there is a standardized process to follow in obtaining the CE Mark. This presentation will give you a solid understanding of the CE Mark requirements and cover each Directive in a manner that will apply to all product manufacturers and distributors, regardless of the type of product produced and sold. Attendees will leave the presentation with a confident feeling knowing that the CE Mark isn't really the giant obstacle it appears to be and that they can sell their product in the EU!

Bio: William Bisenius is Director of Technical Services for Eurofins/CertifiGroup Inc. "Bill" has worked in the regulatory compliance field for over 40 years and is considered to be an international expert in the field of Product Safety. Mr. Bisenius has written and presented many training seminars in his fields of expertise. Throughout his compliance career, Bill has worked closely with some of the top names in the industry including NASA, IBM, Dell, Phillips, and Siemens.

Bill grew up in the Silicon Valley region of California. He graduated from San Jose State University in 1984 with a degree in Electrical Engineering, where he also served as the President of the student chapter of the IEEE. Upon graduation he went to work for Underwriters Laboratories (UL). When UL built a new facility in RTP, Bill relocated to North Carolina. William left UL to lead CertifiGroup, a company he co-founded, performing Consulting Services and Teaching manufacturers how to design their products for immediate regulatory compliance. CertifiGroup was then acquired by Eurofins E&E/MET Labs and Bill became the Director of Technical Services.

Bill is a NARTE certified NCE and NCT and a Trial Experienced Expert Witness. He has authored over 100 whitepapers on Product Safety & Regulatory Compliance and published numerous articles in IEEE journals and other industry trade publications. He is also a well-known trainer in the industry, having created and presented courses in a wide variety of product safety standards.



Room 5 – 11:00 am to 12:00 pm

Title: Optimizing Scale-Up and Scale-Out Data Center and AI System Topologies with Samtec CPX Interconnect

Speaker: Matthew Burns, Global Director, Technical Marketing, Samtec

Abstract: The combination of extreme-density, co-packaged interconnects, next-gen AI accelerators and 100 TB switches form the backbone of bleeding-edge AI and data center system topologies. Co-Packaged Copper (CPC) optimizes 224 Gbps signaling by eliminating BGA packaging losses. This implementation allows for extended reach preserving the viability of copper cable assemblies. Emerging Co-Packaged Optics (CPO) solutions enable high-bandwidth, low-latency optical links that can span multiple racks.

In this presentation, Samtec technical experts will detail next-gen CPC/CPO solutions using the same SMT Co-Packaged CPX connector. This new CPX architecture breaks through existing performance barriers allowing seamless interconnection in next gen switching topologies, scaling multiple GPUs, and enabling AI supercomputing fabrics. An overview of the latest 448 Gbps PAMx technologies will also be presented

Bio: Matthew Burns develops go-to-market strategies for Samtec's Silicon-to-Silicon solutions. Over the course of 25 years, he has been a leader in design, applications engineering, technical sales and marketing in the telecommunications, medical and electronic components industries. He currently serves as Secretary at PICMG. Mr. Burns holds a B.S. in Electrical Engineering from Penn State University.



Room 6 – 11:00 am to 12:00 pm

Title: Electromagnetics for the Working Engineer

Speakers: Dr. Bruce Archambeault - IEEE Fellow, Missouri S&T adjunct professor, EMC Consultant

Abstract: Electromagnetics is considered by many engineers to be incomprehensible, mainly due to their experiences while studying at the university. However, once the messy math is removed, electromagnetics is not difficult to understand! This seminar will explain what some of the most important concepts in EM mean and how to apply them in every day engineering decisions (without the messy math).

Bio: Dr. Bruce Archambeault is an IEEE Fellow, an IBM Distinguished Engineer Emeritus and an Adjunct Professor at Missouri University of Science and Technology. He received his B.S.E.E degree from the University of New Hampshire in 1977 and his M.S.E.E degree from Northeastern University in 1981. He received his Ph. D. from the University of New Hampshire in 1997. His doctoral research was in the area of computational electromagnetics applied to real-world EMC problems. He has taught numerous seminars on EMC and Signal Integrity across the USA and the world, including the past 15 years at Oxford University.

Dr. Archambeault has authored or co-authored a number of papers in computational electromagnetics, mostly applied to real-world EMC applications. He is a member of the Board of Directors for the IEEE EMC Society and a past Board of Directors member for the Applied Computational Electromagnetics Society (ACES). He has served as a past IEEE/EMCS Distinguished Lecturer, EMCS TAC Chair and Associate Editor for the IEEE Transactions on Electromagnetic Compatibility. He is the author of the book "PCB Design for Real-World EMI Control" and the lead author of the book titled "EMI/EMC Computational Modeling Handbook".



Room 3– 2:00 pm to 3:00 pm

Title: Smarter Workflows: Combining AI-Driven PCB Design with In-Design Analysis

Speaker: Michael Alexander, Application Engineering Architect, Cadence

Abstract: AI can dramatically accelerate PCB design—but speed alone isn't enough. To achieve first-pass success, designs must also be validated against critical performance and reliability requirements.

This session follows directly from the AI-powered design workflow workshop offered just before this on, demonstrating how new simulation and analysis capabilities close the loop. Using tools like System Capture and our suite of In-Design Analysis tools, we'll run a complete design through integrated checks for signal integrity, power integrity, electrical overstress, and MTBF. By simulating as we design, we can spot and resolve issues early—before a board ever goes to fab. The result is not just faster design, but higher confidence that the first version will work as intended. Attendees will see how AI and simulation work hand-in-hand to create a streamlined, intelligent flow: one session for designing it right, and one session for proving it's right. This combination of speed and accuracy points the way toward a new era of efficient, reliable PCB development.

Bio: Michael Alexander is an Application Engineering Architect Supporting/Defining Silicon, Package and Board design along with Metaphysical Analysis flows. Have been in the industry for 35 years working roles from EMI and compliance test to Digital design. Has held positions at Alcatel, Telematics, ECI Telecom, White Rock Networks, and Cadence for last 24 years



Room 4 – 2:00 pm to 3:00 pm

Title: Dry Circuits, Wet World: How Parylene Coatings are Tested for Water Defense

Speaker: Alexander Niebroski, R&D Laboratory Manager, HZO Inc.

Abstract: Parylenes are a type of polymer that have seen growing application in protecting PCBs from moisture, chemicals, and other harsh environmental factors. Chemical vapor deposition (CVD) performed under vacuum yields coatings with superior conformality and excellent chemical barrier, dielectric, and optical

properties. To verify coating performance and consistency, a range of metrology techniques are employed, including water vapor transmission rate (WVTR), contact angle measurements, FTIR spectroscopy, nanoindentation, pencil hardness, and more. As demand for robust, high-performance electronics grows, ongoing innovation in both deposition and characterization technologies continues to expand the functional potential of Parylene coatings.

Bio: Drawing on more than a decade of expertise in thin film deposition, metrology, and plasma processing, Alexander oversees materials characterization and failure analysis efforts for global R&D and production teams at HZO. His recent efforts have focused on advancing PECVD processes and optimizing polymer CVD technologies for high-reliability applications. A contributor to innovation in both manufacturing and research, he has earned U.S. and international patents and presented his work at other conferences such as MRS and TMS. His technical leadership bridges the gap between laboratory research and scalable industrial solutions.



Room 5 – 2:00 pm to 3:00 pm

Title: Inside the Module: State-of-the-Art Advances in Computer-on-Module Technology

Speaker: Stone Shih - Director of Product and Sales Management, ADLINK Technology, Inc.

Abstract: Computer-on-Module platforms have evolved from “processor mezzanines” into miniature HPC nodes that now rival 1U servers. This talk surveys the technical frontier, focusing on the new COM-HPC and next-gen COM Express pin-outs that enable:

- *I/O bandwidth: 400-pin connectors supporting 32 GT/s PCIe Gen 5 today and a clear path to Gen 6/7 in the same footprint.*
- *Compute density: 24-core hybrid Intel® architectures, integrated AI/VNNI engines, and up to 128 GB DDR5 on-module.*
- *High-speed networking: Native 10/25/100 GbE KR lanes and time-sensitive-networking (TSN) hooks for deterministic edge workloads.*
- *Scalability & serviceability: Module/carrier separation that lets OEMs refresh CPUs every few years while preserving costly compliance artifacts (EMC, safety, FDA, etc.).*
- *Thermal & power design: Real-world data on cooling 65 W+ processors in fanless enclosures—heat-spreader options, vapor chambers, and SIM thermal simulation tips.*

Attendees will leave with a roadmap of which COM standards best fit next-generation edge-AI, defense, medical, and industrial automation designs—and what trade-offs to expect around signal integrity, PCB stack-up, and long-term availability. No product pitches—just practical engineering insight from 25 years of module evolution.

Bio: Stone Shih has worked across the industrial computing ecosystem for 28 years, providing him with a comprehensive perspective on COM technology evolution. With a B.S. in Mechanical Engineering from National Taiwan University of Science and Technology and an MBA from The Chinese University of Hong Kong, Stone has held roles spanning sales engineering, product management, and business unit leadership at Advantech, AAEON, NEXCOM, and EverFocus.

As Director of AAEON's Industrial System Division, he directed product development roadmaps for networking, security, and industrial automation platforms, leading the business unit to top performance recognition. At AAEON USA, he grew the systems division by 28% while helping customers implement modular architecture strategies—balancing performance requirements with thermal constraints, compliance preservation, and long-term availability concerns.

Stone's experience encompasses the practical trade-offs that define COM platform selection: signal integrity considerations for high-speed interfaces, PCB stack-up decisions, thermal management in constrained environments, and the business implications of module/carrier separation for multi-year product lifecycles. He has worked with engineering teams across medical devices, defense systems, transportation, and industrial automation—vertical markets where design decisions have significant compliance and reliability implications. This session provides an engineering-focused analysis of current COM standards—COM-HPC and next-generation COM Express—examining technical capabilities (PCIe Gen 5 bandwidth, 24-core hybrid architectures, integrated AI engines, high-speed networking) alongside real-world implementation considerations. Stone will address practical questions around thermal design for high-TDP processors, signal integrity requirements, and platform selection criteria for specific application domains.



Room 6 – 2:00 pm to 3:00 pm

Title: Next-Generation Techniques in Electronic Failure Analysis

Speakers: Dr. Steven Crane, Director, Lab Services, ARA-I

Abstract: Modern electronic design faces increasingly complex challenges as integration density and power demands rise. This presentation explores advanced techniques in failure mode and root cause analysis (FMRCA) that are valuable for diagnosing issues across a variety of common system designs, including power management, controls, and system protection, emphasizing practical methods for identifying and mitigating failures early in the design & manufacturing process. A key focus is the value of non-destructive techniques (NDTs) in detecting latent defects, accelerating root cause determination, and preserving evidence for corrective action. Several case studies will highlight the value of utilizing a wide breadth of analytical techniques to improve diagnostic speed & accuracy, thereby reducing the cost of quality in critical electronic applications.

Bio: Dr. Crane serves as the Director of Lab Services at Accident Reconstruction Analysis (ARA). With a focus on providing consistent and accurate analytical results, he oversees the laboratory's operations, ensuring efficient workflow, technical accuracy, and adherence to industry standards. Dr. Crane consults with clients to understand their failure analysis needs and recommend engineering solutions to better characterize client needs. He also serves as a Staff Engineer at ARA. His areas of expertise include consumer product design, product liability, lithium-ion batteries, high power circuit design, low voltage circuit analysis, reliability engineering analysis, and electronic circuit & component design. Dr. Crane is also knowledgeable in manufacturing operations optimization across a variety of electronic systems, including FMEA, 8D, Gage R&R, Designs of Experiment, DMAIC, Continuous Improvement, Yield Bridge Analysis, Reliability Qualification, Extended Quality Testing, and Highly Accelerated Stress Testing, and Ongoing Reliability Testing techniques.

Prior to joining ARA, Dr. Crane served in roles for several leading companies in the technology industry. At Tesla, he was responsible for Reliability and Failure Analysis across Vehicle and Energy Engineering, leading numerous investigations across battery, DC/DC & AC/DC power transformers, electric drive units, vehicle suspension, low voltage, and lighting systems. During his time at Apple, Dr. Crane was responsible for Failure Analysis across all iPhone product lines, from iPhone 5 to iPhone X, and all engineering systems, including Li-ion battery, main logic board, SOC, display, camera, audio, enclosure, and sensors.



Room 3 – 3:30 pm to 4:30 pm

Title: The Future of PCB Design: Allegro X Platform Innovations for 2025

Speaker: Mike Catrambone, Product Engineering Architect, Cadence

Abstract: The Allegro X platform continues to evolve, delivering new capabilities that transform the way engineers approach PCB design. In this session, we'll highlight the latest workflows and innovations that make design faster, smarter, and more connected than ever before. Attendees will see how the Allegro X Platform is expanding beyond traditional tool updates to deliver an integrated platform experience—streamlining the design cockpit, enhancing collaboration, and unlocking new levels of productivity. Whether you've heard about Allegro X before or are just beginning to explore it, this session will showcase how the platform is shaping the future of PCB design with modern, highly connected workflows. Join us to discover how the Allegro X platform helps you not only keep pace with growing design complexity, but also get ahead of it.

Bio: Michael Catrambone is the Product Engineering Architect for Allegro X PCB products at Cadence Design Systems with a focus on Allegro Core Functionality, including Constraint Management, High Speed Interfaces & Interconnect, and Emerging Technologies. Mike joined Cadence in 2012 as a Principal Product Validation Engineer before moving to his current role in 2015. Prior to joining Cadence, he had over twenty-four years of experience in PCB development, Library Management, EDA software support and value-added process improvement. He is deeply involved in the Cadence user community, former Chairman of CadenceLive – Cadence User Group and former Board Member of the International Cadence Users Group.



Room 4 – 3:30 pm to 4:30 pm

Title: Don't Let Heat Derail Your Design: Thermal Considerations Upfront in PCB Design

Speaker: Ryan Miller - Field Application Engineer/Medical Tech Specialist, NCAB Group (USA)

Abstract: Thermal management isn't an afterthought — it's a design strategy. Learn practical tips, simulation insights, and real examples that will help you design smarter, run cooler, and deliver faster. Join us for an eye-opening session tailored for electrical engineers who are tired of scrambling to fix thermal issues late in the design process. Discover how early-stage thermal planning can:

- Improve reliability and performance
- Prevent costly redesigns
- Optimize component placement and PCB layout
- Align with real-world application conditions

Printed Circuit Boards (PCBs) are often home to more than just copper traces—they can contain high-power, high-frequency, and active components that generate significant heat. Without proper thermal management, this excess heat can degrade performance or lead to complete system failure.

This seminar will explore proven methods for managing heat in PCB design, starting at the layout stage. We'll discuss how thermal simulations, strategic material selection, and modern manufacturing techniques can reduce thermal stress and maintain safe operating temperatures. From via farms to copper coins and insulated metal substrates, you'll gain insight into the right heat dissipation techniques for different component needs.

Design smarter, cooler, and more reliable PCBs—starting with thermal considerations up front.

Bio: Ryan Miller started as a Field Application Engineer at NCAB Group in 2022. He is now an FAE with a primary focus on Medical PCBs, PCB Design, and Thermal Management. Ryan started his PCB career in 2012 at a PCB factory where he gained experience in manufacturing PCBs, DFM Analysis, and stackup and impedance design. He graduated from DeVry University with a B.S. in Electronics Engineering Technology.



Room 5 – 3:30 pm to 4:30 pm

Title: From Module to Market: A Practical Design-In Roadmap for Custom COM Carrier Boards

Speaker: Dr. Serchen Chang - Product Sales Manager, ADLINK Technology, Inc.

Abstract: Picking a COM is only the first step—the real engineering begins when you marry that module to a purpose-built carrier. Drawing on two decades of hands-on design-in support, this session maps out a repeatable workflow that keeps projects on schedule and within budget:

1. Requirements capture: Translating functional specs into connector-pin budgets, power envelopes, and PCB layer counts.
2. Reference-design leverage: How to mine the PICMG COM-HPC Carrier Design Guide and proven schematics to shortcut risk.
3. Signal-integrity & stack-up: Routing PCIe Gen 5, 25-GbE-KR, and USB4 while meeting Δ -T targets; choosing loss-optimized laminates.
4. Power-/Thermal-co-design: DC-DC stage selection, load-step validation, mechanical keep-out for heat spreaders, and CFD checkpoints.
5. Firmware & BSP hand-off: Secure boot, board-ID EEPROM, carrier-specific ACPI tables, and automated regression test hooks.
6. Design for X: Manufacturability, test, compliance, and—crucially for CMs—how to structure DFX reviews so issues surface before Gerber release.

Real case studies illustrate pitfalls (e.g., marginal eye diagrams on 30-inch PCIe lanes) and the quick wins that shave weeks off EVT. Engineers, students, and contract manufacturers will gain a clear blueprint for turning any COM into a robust, certifiable product—whether the target is a handheld medical scanner or a ruggedized radar processor.

Bio: Dr. Serchen Chang brings over 20 years of embedded systems development experience to a session focused on the practical realities of COM carrier board design. With a Ph.D. in Electrical Engineering from National Cheng Kung University, Serchen has held hands-on engineering roles throughout his career—developing H.264/MPEG4 video codecs on DSP platforms, architecting ARM-based embedded systems, and leading R&D teams at AVerMedia, AVer Information, and LITEON Technology.

His background spans the full product development cycle: from initial requirements capture and schematic design through signal integrity validation, thermal management, firmware integration, and production ramp. At AVerMedia, his team developed an embedded surveillance platform that earned the 2007 CES Best Innovation Award. As Technical Product Manager supporting OEM/ODM customers across Japan and the U.S., he guided engineering teams through the carrier board design process—helping them navigate reference designs, resolve signal integrity issues, coordinate BSP hand-offs, and structure design-for-manufacturing reviews.

This session draws on Serchen's experience with real-world design challenges: managing PCIe Gen 5 signal integrity across extended trace lengths, validating power delivery under load transients, optimizing thermal solutions within mechanical constraints, and coordinating the firmware dependencies that often become critical-path issues. Attendees will gain practical insight into proven workflows, common pitfalls, and design decisions that significantly impact schedule and budget.

Dr. Chang is also a FAA-certified Flight Instructor with 1,600+ flight hours.



Room 6 – 3:30 pm to 4:30 pm

Title: Advanced Materials and Process for HDI Designs

Speakers: Mr. Paul Cooke, Senior Director of Application Engineering, AGC Multi-Materials America

Abstract: Designing printed circuit boards (PCB) and assemblies is more difficult than ever due to complexity, component availability, thermal requirements, signal integrity, material selection, layer counts, harsh environments and increased functionality all required in smaller form factors. We will look at all the elements to successfully manufacture a PCB that can meet all the designers' requirements and perform to the customer and industry standards as well as survive in today's harsh environments. We will look at some of the more advanced process' and materials being adopted by the fabricators to produce smaller, thinner more reliable and faster production times to meet quick turn requirements. We will look at various processes and materials including plating shut, interposer designs, high reliability, high layer 5+ stacked microvia designs with 3 mil microvias, heavy copper solutions, and new hole fill processes without the need to planarize. All these processes need to ensure the product is robust as possible with a high level of confidence that it has been designed for extended life in the field.

Bio: Paul has more than 35+ years of experience in printed wiring board (PWB) design and manufacturing.

Paul has held senior positions in Operations, Quality, Process Engineering and Field Application Engineering, at some of the top North American PCB manufacturers.

He serves on a number of IPC technical committees and co-chairs the IPC standard 9121, Troubleshooting for Printed Circuit Boards. He is a member of the IPC Technical Program Committee. He has co-authored numerous technical papers and works with Tier 1 designers in the Avionics and Space industry to design and develop products that need to have extended life, focusing on printed circuit board design and reliability.

Paul has provided design for manufacture (DFM) consulting services to the industry along with extensive training/educational presentations from PCB 101 through Enhanced Reliability. He has also served as Team leader on a number of HDPUg projects and is currently demonstrating to the industry the advantages of using non-reinforced materials.

Bronze Sponsor



3G Shielding Specialties

www.3gshielding.com

Table #43

3G Shielding Specialties is a leading designer and manufacturer of EMI/RFI Shielding materials. We specialize in standard and custom board level shielding for both surface mount and through-hole applications. In addition to our board level shielding, 3G offers RF Absorbers, Enclosure EMI Gaskets, Thermal Interface Materials, Machined Housing and Form-in-Place Gaskets.

Bronze Sponsor



Abatek Americas Inc

www.abatek.com

Table #33

Since 1985, Abatek (Americas) Inc. has been a global leading manufacturer and marketer of silicone rubber keypads; connectors; rubber, plastic, and metal components; membrane switches; subassemblies; and various input solutions for use in electronic devices. IATF16949, ISO9001, ISO14001.

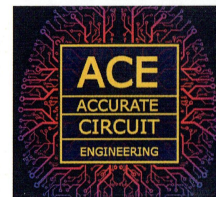


Accident Reconstruction Analysis, PLLC

www.ara-i.com

Table #14

Accident Reconstruction Analysis, PLLC provides forensic analysis for motor vehicle crashes, industrial incidents, product failures, and fires. Using engineering principles, physics, and advanced lab tools like CT scanning and SEM, they reconstruct events and analyze failures. Their team includes fire investigators and electrical engineers for product testing and failure analysis. Their science-based assessments support legal cases, insurance claims, and law enforcement investigations.



Accurate Circuit Engineering

www.ace-pcb.com

Table #80

Accurate Circuit Engineering (ACE) is AS9100, ITAR and Mil-Spec Certified manufacturer of high-technology quick turn PCBs, with deliveries in as little as 24 hrs. ACE has continued to stay on the leading edge of technology offering only the Best Quality PCBs in the shortest amount of time. ACE also offers Assembly making ACE a full turnkey solution. RF, Antenna and Microwave Experts. From Hybrid PTFE to HDI blind and buried via constructions, ACE where Quality and Speed come together.



ACDi

www.acdi.com

Table #26

ACDi is an electronics manufacturing services provider. Core competencies include printed circuit board layout to box-build assemblies, new product introduction, testing, systems integration, product lifecycle management, product engineering support services, and cable assemblies/wiring harnesses.



Allegheny Performance Plastics

alleghenypformanceplastics.com

Table #13

Since 1936, Allegheny Performance Plastics has been a pioneer in processing high-temperature, high-performance, specialty thermoplastics. We manufacture components for the aerospace, space, defense, and e-mobility industries, as well as many others. With capabilities that include in-house prototyping, tool repair and machining, as well as injection-molding high-temperature thermoplastics, Allegheny is innovating a new, customer-centric process that delivers the right solution for our customers.

Bronze Sponsor



AllSpice.io

www.AllSpice.io

Table #63

AllSpice.io is a hardware collaboration platform that connects native engineering design tools to provide effortless Git-based revision control, a central hub for cross-team collaboration, workflow automation, and design analytics. Hardware Engineers, PCB Designers, and Electrical Engineers leverage the platform at startups to Fortune 500s. Customers include robotics, instrumentation, aerospace, consumer electronics, transportation, medical devices, and automotive firms.

Silver Sponsor

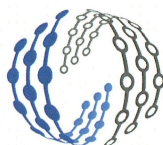


Altium Inc

www.altium.com

Table #L7

Altium Limited, part of the Renesas Group, is transforming how electronics products are designed, built, and delivered. The Altium Platform connects every stakeholder, discipline, and development phase, simplifying and accelerating product creation. With next-generation solutions—Altium Discover, Altium Develop, and Altium Agile—together with Altium 365 and Altium Designer, Altium empowers engineers and enterprises of all sizes to deliver smarter, more connected products faster than ever.



AMERICAN CIRCUITS

American Circuits, Inc.

www.americancircuits.com

Table #60

American Circuits, Inc. is a contract manufacturer specializing in turnkey PCB assembly and related services from design to box builds. We are located in Charlotte, North Carolina and have been a local one-stop solution for over 30 years.

**APTUS
DESIGNWORKS**

APTUS DesignWorks Inc.

www.aptusdesignworks.com

Table #85

From concept to manufacturing, APTUS DesignWorks provides expert engineering to bring your product to market. We empower startups, manufacturers, and global companies with product development applying nearly two decades of experience in mechanical, electrical, and machine design to solve your toughest challenges.

Bronze Sponsor

ARROW
Five Years Out

Arrow Electronics

www.arrow.com

Table #56

Arrow Electronics is a global distributor of electronic components and guides innovation forward for over 220,000 leading technology manufacturers and service providers. Arrow develops technology solutions that improve business and daily life.

ATI

ASSEMBLY TECHNOLOGIES INC.

Assembly Technologies Inc

www.assemblytechinc.com

Table #81

Assembly Technologies Inc (ATI) is a Contract Manufacturer offering turn key electronic manufacturing services. We are able to offer a diverse range of solutions in addition to our core capability of turnkey manufacturing. Our Subsidiary in India, allows us to offer cost-effective solutions for our volume customers. Contact us to see if ATI can provide the right solutions for your manufacturing needs.



Aurora Technical Group
www.auroragroup.net

Table #16

Aurora Technical Group - Manufactures representation firm for electro-mechanical, mechanical and electronic components such as: motors, touchscreens, pcbs, gears, bearings, shafts, belts, microphones, speakers buzzers, haptics, pressure sensors, ultrasonics, transformers, magnetics, capacitors, resistors, switches, oscillators, time relays, monitoring/protection relays, auxiliary relays, digital time switches, power supplies, installation contactors EV connectors and interconnects and more!



**Tools for
Advancing
Innovation™**

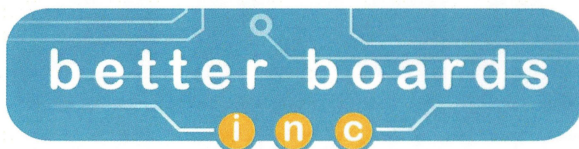
Aven Inc
www.aventools.com

Table #90

Aven is a Michigan-based company that offers Products for the Electronics Assembly Industry in 3 main categories: 1. Microscopy (Digital microscope systems, and Stereo-Zoom Bi & TRInocular Microscope Systems. 2. LED Magnifier Lights & Task Lights 3. Precision Hand Tools for Micro-assembly processes: Cutters / Tweezers & Pliers, and more. . . .

Grand Prize Sponsor

Gold Sponsor



Better Boards, Inc.
www.betterboards.com

Table #1

Better Boards offers a wide variety of engineering services centered around PCB design. Our experience encompasses many industries and technologies. We partner with you as an extension of your product design and engineering team "Because your design is the most important one". Check out the services link on our website for a complete list of our services.

Bronze Sponsor



C & C Technologies, Inc.
www.candctechinc.com

Table #44

At C & C Technologies Inc., innovation defines our approach. With over 50 years of expertise, we have been at the forefront of supporting our clients in achieving their goals through cutting-edge lab testing and technological solutions. Our unwavering focus on your business objectives sets us apart. We are committed to realizing your vision by offering strategic environmental and mechanical testing services, state-of-the-art lab facilities, and a range of comprehensive solutions.



Cadence Design Systems
www.cadence.com

Table #22

Cadence is a market leader in AI and digital twins, delivering cutting-edge computational software to accelerate innovation in engineering design from silicon to systems. Their Intelligent System Design™ strategy enables top semiconductor and systems companies to develop next-generation products across computing, automotive, aerospace, and robotics industries. In 2024, the Wall Street Journal recognized Cadence as one of the top 100 best-managed companies. Learn more at www.cadence.com.

Major Sponsor



Bronze Sponsor

Carolina Electronic Assemblers, Inc.
www.ceamanufacturing.com

Table #8

CEA Manufacturing is a full service contract manufacturing company serving all industries. CEA specializes in the development and manufacturing of printed circuit board assemblies, cable assemblies and related electronic products. We offer a full range of services from simple prototype assemblies to full turnkey solutions, thus giving our customers maximum flexibility when choosing the level of service required.

Gold Sponsor



Circuit Technology, Inc.

www.circuittechnology.com

Table #23

IPC certified master training center. Certifications in IPC 7711/7721 rework and repair, 610 acceptability of electronic assemblies, J-STD-001 solder and soldering process, 620 WHMA acceptability of wire and cable assemblies, 600 acceptability of bare circuit boards. Onsite and custom classes also available. Training centers located in MD, NC, SC, VA, FL and Costa Rica. We also specialize in tools and equipment for PCB assembly, repair, and rework.

Bronze Sponsor



Circuitly

www.circuit.ly

Table #39

Circuitly is a company that has developed a collaborative, browser-based circuit board design tool that was built to work with KiCad. Our goal is to bring modern workflows including AI to the PCB design industry.



**conductive
containers inc.**

Conductive Containers Inc

www.corstat.com

Table #36

Industry Leader providing Packaging and Handling Solutions to Prevent ESD, FOD, and Physical Damage to PCBA's.

Bronze Sponsor



Device Solutions

www.device-solutions.com

Table #51

Device Solutions is a full-service embedded engineering firm focused on the design, development, and optimization of connected products using cellular and RF technologies. Since 2003, we've supported clients across industrial, medical, consumer, and mission-critical sectors. Our expertise spans RF design, firmware, system integration, and certification, and we've delivered solutions across multiple generations of wireless standards, from 2G to today's emerging technologies.



Electronic Interconnect

www.eiconnect.com

Table #64

Electronic Interconnect has been a top PCB manufacturer for 25 years, serving OEMs, contract assemblers, and designers. EI excels in producing quick-turn prototypes to production PCBs under ISO 9001, AS9100D, and ITAR regulations. We ensure customer satisfaction across the military, aerospace, automotive, communications, and machinery markets.



Ellsworth Adhesives

ellsworth.com

Table #58

Ellsworth Adhesives is a global leader and trusted distributor of adhesives, specialty chemicals, and dispensing equipment. With 50 years of experience, we excel at providing high-quality products and services. Ellsworth Adhesives offers expert advice, valuable services, decades of experience, and a host of resources to ensure the total solution for our customers' application needs.

Major Sponsor



EMA Design Automation

www.ema-eda.com

Table #21

EMA Design Automation is a trailblazer in product development solutions offering a complete range of EDA tools, PLM integrations, services, training, and technical support. EMA is a Cadence® Channel Partner serving the Americas, UK, India, and Europe. EMA is a privately held corporation headquartered in Rochester, New York. Visit www.ema-eda.com for more info.



Emerging Power

www.emergingpower.com

Table #79

Emerging Power was founded in 2000. We are a small business incorporated in the state of New Jersey. We offer superior Battery Design and Manufacturing capabilities to our customers. We are very fortunate to be the supplier of choice to over ten Fortune 100 Companies. I welcome the opportunity to discuss your energy needs and how we, at Emerging Power, may help you and your company find solutions. I would like to thank you for considering Emerging Power.



Eurofins CertifiGroup

www.certifigroup.com

Table #53

Eurofins CertifiGroup is the coming together of the very best in regulatory compliance, product safety and many other fields of testing and certification. Our experience comes from years of evaluating and testing systems, products and equipment of every category and type imaginable. If it's been manufactured, we've seen it. If it's new, we know about it.



FabSource Group

www.fabsourcegroup.com

Table #55

Manufacturers' Reps of mostly custom engineered and manufactured components for the electronics manufacturing industry. We specialize in representing CEMs who can supply the complete product assembly (box-build), in addition to the board-level assembly. We also rep bare printed circuit board manufacturing and select hardware manufacturing such as custom plastic and metal enclosures.



Faradworks

www.faradworks.com

Table #67

Our flagship product, PinScope, allows electrical engineers to validate schematics against datasheets using AI



Flip Electronics

www.flipselectronics.com

Table #59

Flip Electronics is a leading provider of obsolescence management solutions, offering authorized distribution and extended-life semiconductor manufacturing. Since 2015, Flip has tackled industry shortages and product obsolescence by delivering tailored supply chain solutions to OEMs and contract manufacturers worldwide. Leveraging robust supplier partnerships and deep expertise, Flip integrates factory-direct components with proactive end-of-life mitigation strategies.

Bronze Sponsor



Fuji America Corporation

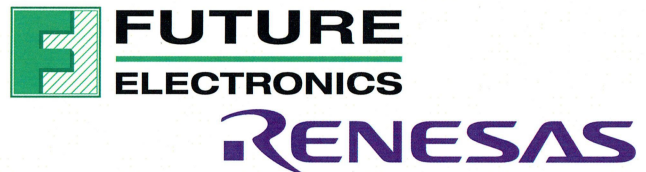
www..com

Table #87

Fuji America, a market leader in SMT Pick & Place solutions and Smart Factory software, is dedicated to advancing modern manufacturing. Our high-quality, high-speed placement machines and screen printers incorporate cutting-edge technology to meet today's demands. As pioneers in vision processing for parts recognition, our robotic electronic component mounters solidify our position as industry leaders.

Grand Prize Sponsor

Bronze Sponsor



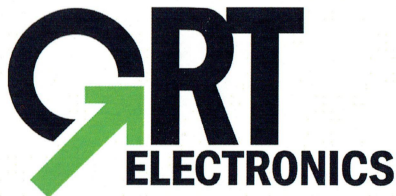
Future Electronics - Renesas

www.futureelectronics.com

Table #74

www.renesas.com

FUTURE: FROM CONCEPT TO CREATION- Our world is constantly changing, technology continues to evolve, and design requirements are more complex. Future Electronics recognizes the importance of being your valued engineering partner every step of the way. **RENESAS: A GLOBAL LEADER IN MICROCONTROLLERS, ANALOG, POWER, AND SOC PRODUCTS-** Renesas Electronics Corporation delivers trusted embedded design innovation with complete semiconductor solutions to enhance the way people work and live.



GRT Electronics, LLC

www.grtelectronics.com

Table #89

GRT Electronics, LLC is an ISO 9001:2015 certified contract manufacturer conveniently located in Raleigh near NC State University. Our specialty is small to medium volume production runs. We have automated surface mount assembly lines and x-ray equipment. In addition to SMT assembly, we offer through hole assembly, cable and mechanical assembly, as well as procurement, test and repair services. Our experienced staff is our greatest asset.



H-Math

www.h-math.com

Table #50

H-Math is an Electrical and Electronics Design consulting firm specializing in Embedded Electronics Product Development. Services are tailored to support the full product life cycle – from raw requirements to fully functional hardware – with focused expertise at every stage, including post-production support. **SERVICES:**
 - Consulting and Monthly/Quarterly Retainer Plans - Design Rescue and Technical Audit - Turnkey Hardware Development - Regulatory and Compliance Mitigation.

Bronze Sponsor

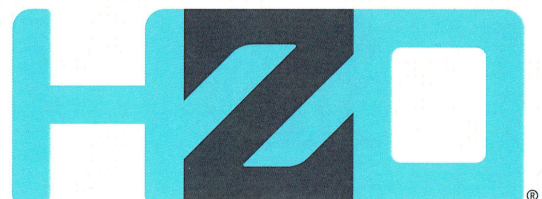


HARTING

www.HARTING.com

Table #45

HARTING is the gold standard in connectivity for industrial environments and mission-critical applications. As the pioneer in connectivity, we combine the quality and customer service of our family-owned operations with a global footprint backed by in-region manufacturing facilities and local teams with deep engineering expertise. With a reliable and robust approach to connectivity for any environment, we enable increased efficiency in development, production, performance, and collaboration.



HZO Inc.

www.hzo.com

Table #66

HZO provides high-reliability coatings for when electronic product failure isn't an option. We can help you get started quickly with our turnkey application solution for adaptable, scalable production. Our solutions revolve around your convenience - outsource to worldwide locations or use our factory-in-factory business model. Our coatings are REACH, RoHS, and Prop 65 compliant, with millions of PCBs coated and no product returns due to coating issues. Speak to an engineer about your project.



IEEE NC Council
site.ieee.org/ncc

Table #L5

IEEE is the world's largest professional association advancing technology for the benefit of humanity. It publishes technical journals, sponsors conferences, develops technology standards, and supports the professional interests of more than 400,000 members. IEEE creates an environment where members collaborate on world-changing technologies—from computing and sustainable energy systems to aerospace, communications, robotics, and healthcare to engineer a better tomorrow.



IES, Inc.
www.iesgray.com

Table #83

Founded in 1989, Industrial Electronics Services, Inc. (IES) is a technology-based company providing design, manufacturing, and lifecycle management services for electronic products. We serve value-centric clients across the Military, Aerospace, Energy, Transportation, Medical, Communications, and Industrial markets.



Gold Sponsor

Imagineering Inc.
www.PCBnet.com

Table #41

Imagineering specializes PCB Fabrication and Assembly (full turnkey solution). We offer same-day turnaround for prototyping and production in as few as 7 days, along with dynamic quoting and ordering. With our domestic and offshore manufacturing facilities and state-of-the-art production capabilities, you'll receive aerospace quality at standard prices. From prototype to production, we can support any businesses needs big or small.



Impact Embedded, LLC
www.impactembedded.com

Table #70

Product development consultancy with expertise in embedded systems hardware and software. - Schematic and PCB design - Microcontroller firmware - Desktop/mobile/web application software - Tightly integrated electromechanical systems We especially love early-stage prototype development!



Indium Corporation
www.indium.com

Table #72

Indium Corporation is a premier materials refiner, smelter, manufacturer, and supplier to the global electronics, semiconductor, thin-film, and thermal management markets. Products include solders and fluxes; brazes; thermal interface materials; sputtering targets; indium, gallium, germanium, and tin metals and inorganic compounds; and NanoFoil®. Founded in 1934, the company has technical support, sales, and factories globally.



Bronze Sponsor

Ingun USA, Inc.
www.ingun.com

Table #3

INGUN! - Development partner for innovation - The highest quality standards - Global presence with an unbeatable portfolio With our products and services, we contribute to our customer's technological visions becoming a reality. New, sustainable technologies for the progress of our world could not be developed reliably without our innovative solutions. Verified by INGUN is our contribution to future technology. We are your Partner for Future Technology!



www.jbctools.com

JBC Tools USA Inc

www.jbctools.com

Table #48

More than 80 years of experience have placed JBC at the technological forefront of tools for soldering and rework operations in electronics. Innovation, efficiency and reliability are the key features of a wide range of products which have been designed to satisfy the most demanding requirements of professionals.

Bronze Sponsor



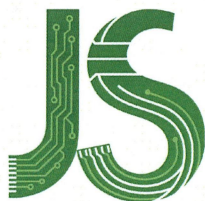
Joulescope

www.joulescope.com

Table #62

Simplifying Low-power Design Develop products with longer battery life and no surprises. Joulescope™ by Jetperch LLC is the affordable, precision energy analyzer. The Joulescope JS220 streamlines low-power design, providing clear and immediate insights. With seamless measurements from 1 nA to ±10 A across sleep and active modes, Joulescope is the right tool for designing modern low-power and battery-powered products. Join us at our booth for a hands-on experience.

Bronze Sponsor



JS CIRCUIT

www.jsircuit.com

Table #30

JS Circuit is a professional Flex PCB, Rigid-flex ,PCB ,Assembly, turnkey solution provider JS has cooperated with 500+ high-tech Research and Development, manufacturing, and service enterprises in fields of Telcom, Medical, Industrial, Military, Consumer electronics, EV etc., in more than 20 countries and regions throughout the world with the good quality service.



JTAG Technologies, Inc.

www.jtag.com

Table #29

We believe that boundary-scan is a superior technology to overcome the test and programming challenges in today's and tomorrow's modern electronic assemblies. Our mission is to offer customers added value with a complete range of powerful hardware and software products allowing customers to optimize their applications and maximize the benefits they achieve from boundary-scan implementation.



Keystone Compliance

www.keystonecompliance.com **Table #25**

Keystone Compliance is a regulatory compliance test lab that offers EMC, product safety, package, ingress protection and environmental testing. Our Durham lab features two three-meter EMC test chambers. Manufacturers partner with Keystone because of our large scope, proactive engineering guidance, constant communication, thorough reports and short lead times on scheduling. Our 17025 accredited test reports are accepted around the globe.

Bronze Sponsor



KiCad

www.kicad.org

Table #40

KiCad is an open source software suite for Electronic Design Automation (EDA). The programs handle Schematic Capture, and PCB Layout with Gerber, ODB++ and IPC-2581 output. The suite runs on Windows, Linux and macOS. KiCad is the world's most popular circuit design system with over 500,000 monthly active users from single designer shops to Fortune 100 companies. We support professional users that want reliable, personalized service.



Kipo AI
www.kipo.ai

Table #95

Kipo AI is an AI-powered sourcing tool that helps engineers find, select, and source mechanical and electronic parts, combining datasheets, pricing, lead times, and alternatives to streamline work.

Bronze Sponsor



Lincoln Technology Solutions
www.lincolntechsolutions.com **Table #9**

Lincoln Technology Solutions (LTS) is proud to exhibit the best displays in the world at PCB Carolina 2025! Lincoln Technology Solutions is a Design Services and LCD and OLED Integration Company, focused on creating solutions with unrivaled optical performance. We have in-house engineering expertise in all disciplines with prototype manufacturing in NC, US. We pride ourselves on offering the flexibility, agility, and creativity that you can't find with other companies offering similar services.



Lindstrom Precision Tools
www.lindstromtools.com/us_en **Table #35**

Lindström is one of the oldest continuous producers of precision hand tools in existence today. Lindström offers a wide variety of precision cutter, holding pliers, specialty cutters / pliers, tweezers, screwdrivers, and torque tools. Metallurgy, manufacturing techniques, and tremendously skilled crafts people particularly in the hardening of steel are the hallmarks of this world-renowned manufacturer.



We realize ideas

METZ CONNECT USA
www.metz-connect.com **Table #75**

METZ CONNECT, formerly RIA CONNECT, is a medium-sized, family-run German company founded in 1976. METZ CONNECT stands for high quality interconnect technology manufacturing in standard and custom signal and data connectors and I/O modules. Products include PCB mount terminal blocks and board to board connectors, field terminated Ethernet connectors, patch panels and intelligent DIN Rail mount I/O devices.



Millennium Circuits Limited
www.mclpcb.com **Table #27**

Millennium Circuits Limited (MCL) is an industry-leading, printed circuit board supplier based in Pennsylvania. Our goal is simple: we want to supply the best PCB each and every time — engineered for ease of manufacturability, produced according to customer specifications and expectations, and competitively priced. Whether we're delivering small batches or medium- to high-volume PCBs or generating a prototype for a brand-new product, Redefining Customer Service is our commitment.

Gold Sponsor



NCAB Group
www.ncabgroup.com **Table #15**

NCAB Group is a leading global PCB supplier with a local presence in over 45 markets with 6 local offices in the US. Our mission is to supply high-reliability PCBs for demanding customers, on time with zero defects, produced sustainably at the lowest total cost.



Newgrange Design

Newgrange Design

www.newgrangedesign.com

Table #88

We are an EE Services company with a focus on PCB Design. We have 30+ PCB Designers on our team. We are all US citizens (ITAR compliant) and work out of our Boston area office. We support Altium and Allegro (OrCAD) predominantly with a little PADS still.

Bronze Sponsor



NXP Semiconductors

www.nxp.com

Table #68

NXP designs purpose-built, rigorously tested technologies that enable devices to sense, think, connect and act intelligently to improve people's daily lives.



Bronze Sponsor

Oak-Mitsui Technologies

www.oak-mitsuitechnologies.com

Oak-Mitsui Technologies is a wholly owned subsidiary of Mitsui Kinzoku headquartered in Frankfort, Kentucky. The company's strengths include expertise in copper foil manufacturing and resin technology. We offer FaradFlex, a high-performance ultra-thin laminate. By using FaradFlex you can optimize signal/power integrity, minimize EMI, reduce surface mount passives, and enhance PCB reliability. Applications include PCBs, MEMS/RF modules, and chip packages. We also offer MicroThin and VSP.



Ophir RF

www.ophirrf.com

Table #12

Ophir RF boasts one of the most comprehensive arrays of high-power, solid state, radio frequency (RF) amplifiers in the industry. Established in 1992 by a group of engineers with diverse talents and backgrounds. Ophir's initial charter was to design the most challenging of broadband linear amplifiers. The knowledge and design experience gained through the years has allowed Ophir RF to supply broadband and band-specific RF and microwave amplifiers to domestic and international markets.



Orbel Corporation

www.orbel.com

Table #65

Based on decades of experience and a commitment to the leading edge of fabricating technology, Orbel's EMI/RFI shielding capabilities span from design and engineering to prototyping and testing to production and delivery. Orbel expertly transforms your precise performance needs into a working solution.

Bronze Sponsor



PalPilot

www.PalPilot.com

Table #17,18

"Pal" embodies the value of strong customer and partner relationship and recognition; "Pilot" demonstrates our forward drive as a supply and demand solution leader.

Silver Sponsor



PARPRO

www.parpro.com

Table #42

PARPRO is your trusted source for manufacturing solutions. We specialize in leading-edge custom PCB assembly (PCBA) and EMS manufacturing, along with electro-mechanical services, wire harness/cable assembly, precision machining and sheet metal fab, box build assembly, and system integration. We serve a variety of markets with locations in the USA and Mexico and pride ourselves on delivering simple to complex solutions with quality systems such as ISO 9001, ISO 13485, AS 9100D, NADCAP and ITAR.



PDR Rework/Xray Inspection

pdr-rework.com www.pdr-xray.com Table #46

Manufacturer of PDR Focused Infrared Rework Systems for SMD Rework. Manufacturer of PDR XRay systems for Manual or Automated PCB Inspection with Analysis Tools in 2D or 3D Tomosynthesis capabilities. PDR was founded in 1985 with Installations and support services worldwide.

Bronze Sponsor



PE Manufacturing

www.PeMfg.com

Table #24

PE specializes in SMT, Assembly, CNC, and Laser Cutting, and we design and execute the most relevant solutions for our customers' individual needs.



Photo Chemical Systems

photochemicalsystems.com

Table #5

Photo Chemical Systems is a supplier to Electronics Manufacturing and Graphic Printing. We help domestic producers source the best solutions in a global supply chain and provide complete systems of chemicals, consumables, equipment and service. Photo Chemical Systems has been serving the Printed Circuit Board and Screen Printing industries for over 50 years. Our goal is to offer manufacturers integrated solutions and provide everything they need to produce.



Photonics Systems USA Inc.

photonics-systems-group.com Table #31

The Photonics Systems Group develops, produces and sells high-precision system and process solutions for laser applications in the photovoltaics, electronics and semiconductor industries worldwide.



PICA Manufacturing Solutions

www.picamfg.com

Table #57

PICA Manufacturing Solutions is a leader in Flex and Rigid PCB manufacturing, known for exceptional engineering support and customer service. Unlike others, PICA forms true partnerships with clients, ensuring products are designed efficiently, built on time, and manufactured correctly. Serving industries from medical to telecom, PICA's expertise and in-house resources help avoid costly issues, ensuring a smooth process from design to delivery. With PICA, you get a partner, not just parts.

PREES
Laboratory

NC STATE UNIVERSITY

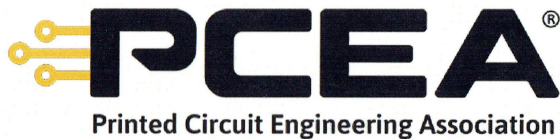


Pkg Research Lab-NC State Univ.

www.PREES.Org

Table #L2

PREES is the Lab for "Packaging Research in Electronic Energy Systems" at NC State University. We have full capability to work with bare power die. Dispense, reflow solder, encapsulate with direct bonded Cu (DBC) ceramic along with new organic laminate and film systems to create multi-layer power packages. Lab is equipped with small and heavy wire bonders. DCHopkins@NCSU.Edu.



Printed Circuit Engineering Association

www.pcea.net

Table #L4

"Nonprofit association promoting printed circuit engineering as a profession through the exchange of information and the integration of new design concepts through a worldwide network of chapters. Products include digital.pcea.net monthly magazine, pcdandf.com/circuitsassembly.com, pcbupdate.com newsletter, pcbeast.com/pcbwest.com events, pcbchat.com podcast and pceatraining.net PCB design training and certification.

Silver Sponsor



RBB

www.rbbsystems.com

Table #61

RBB uses more than 50 years of expertise and flexibility to manufacture high-quality, mission-critical printed circuit board assemblies and industrial control panel assemblies. RBB strives to move heaven and earth to meet our clients' needs, serving the industrial, commercial, medical, and military sectors. We combine the best lean manufacturing principles with a hungry can-do attitude.

Bronze Sponsor



Plexus Corp.

www.plexus.com

Table #71

Since 1979, Plexus has been partnering with companies around the world to transform their concepts into branded products and deliver them to the market. We're a global force of over 20,000 team members who draw inspiration from solving your most complex product challenges. At Plexus, we're dedicated to providing you with a seamless product realization experience with customer service like you've never seen in the electronics manufacturing industry.

ProTronics, Inc.

Protronics Inc

www.protronics-inc.com

Table #L6

Over the last 30 years, Protronics has provided quick-turn, low- to medium-volume PCB assembly and prototyping services to companies across the US, including small to large enterprises such as Nvidia, ABB, Honeywell, Schneider Electric, and Wolfspeed. We have a strong reputation for speed, high quality, and excellent customer service. Strong capabilities in PCBA, NPI / Prototype assembly, BGA rework, X-ray inspections, Wire harness, cable assembly, and Environmental / Reliability Testing.



Recom Power

www.recom-power.com

Table #6

RECOM Power is a manufacture of on and off board modular AC/DC Power Supplies, DC/DC Converters, Switching Regulators and LED Drivers. RECOM Power has over 30,000 compact power supplies for use in a wide variety of applications.



RMF Design and Manufacturing Inc.
Electronic Engineering, Design, Prototyping and Manufacturing

RMF Design and Manufacturing Inc.
www.rmfdesign.com **Table #54**

We provide a comprehensive mix of electronic design and manufacturing services. We will help you design, prototype and manufacture all your pcba's all under one roof, saving you time and money. Founded in 1983, we are ISO 9001:2015, ISO 13485:2016 IPC A-610, J-STD-001, 7711/7722, Class 2 and 3 FDA registered. We offer turnkey solutions, including box build assembly, registered with CGP, testing, AOI, Flying probe, Functional testing, and much more.



Rochester Electronics®

Rochester Electronics
www.rocelec.com **Table #69**

Rochester Electronics is the world's largest continuous source of semiconductors, 100% authorized by over 70 leading semiconductor manufacturers. Rochester's comprehensive semiconductor lifecycle solutions include authorized distribution, licensed manufacturing, and manufacturing services.



Silver Sponsor

Rohde & Schwarz
www.rohde-schwarz.com **Table #L1**

Rohde & Schwarz is one of the world's leading manufacturers of Test and Measurement, Secure Communications, Monitoring and Network Testing, and Broadcasting equipment. Founded more than 80 years ago, the independent company has an extensive sales and service network with subsidiaries and representatives in more than 70 countries. Incorporated in the United States since 1978, Rohde & Schwarz USA, Inc. has a large team of sales and application engineers throughout North America.



Sahasra

Sahasra Electronics
www.sahasraelectronics.com **Table #92**

Sahasra Electronics is a contract manufacturer with locations around the world and its headquarters in India. Sahasra manufactures PCB's, PCBA's, cable assemblies, and full box builds.



Samtec
www.samtec.com **Table #73**

Founded in 1976, Samtec is a privately held, \$900 million global manufacturer of a broad line of electronic interconnect solution blocks, including IC-to-Board/Ultra Micro, High Speed Board-to-Board, High Speed Cables, Future- Proof/Active Optics, Flexible Stacking, and Micro/Rugged components and cables. We have developed unique Technology Centers to help optimize the entire signal transmission path.



Saturn Electronics Corporation
www.saturnelectronics.com **Table #34**

Saturn Electronics Corp. ("SEC") is a rigid printed circuit board manufacturer located in Romulus, MI. We maintain numerous certifications including ISO/IATF16949, AS9100, Delphi (Aptiv) C7000, and ITAR Registration, most of which are geared toward high reliability applications that exceed industry norms. We offer a variety of technologies including HDI, embedded coin, and a variety of RF materials production.



Seymour Advanced Technologies
www.seymouradvancedtechnologies.com **Table #94**

SAT aims to equip clients with "competition-diminishing" toolboxes through rapidly developed, high-precision automation systems, leveraging their expertise in advanced technologies and the agility of their vertically integrated, in-house manufacturing capabilities, all underpinned by an unwavering commitment to meticulous project management. Industries we thrive: Medical & Life Sciences Aerospace & Defense Electric Assembly

Major Sponsor

SIEMENS

Siemens
eda.sw.siemens.com **Table #19**

Siemens is driving transformation to enable a digital enterprise where electronic systems engineering and manufacturing meet tomorrow. Xcelerator, the comprehensive and integrated portfolio of software and services from Siemens (Xpedition, PADS, HyperLynx, and Valor), helps companies of all sizes create and leverage a comprehensive digital twin that provides organizations with new insights, opportunities, and levels of automation to drive innovation.

Bronze Sponsor

SIERRA CIRCUITS

Sierra Circuits, Inc.
www.protoexpress.com **Table #52**

Back in the mid 1980's, while other manufacturers were simply fabricating circuit boards, Sierra Circuits was constantly reinventing itself while pushing the envelope to help revolutionize the PCB industry. As a family-run business, the idea of establishing quicker cycle times was born out of the existing industry inefficiencies. Specializing in quick turn PCBs and medium production runs, Sierra Circuits' primary focus is delivering the highest quality product in the shortest amount of time.



Sierra RF
www.sierrarf.com **Table #76**

Sierra RF is Manufacturer's Representative in the Southeastern US. Sierra RF specializes in RF components and helps customers in the RF, Microwave and Wireless Industries with RF solutions, parts selection and design optimization in terms of cost and performance.



SMTA Carolinas
www.smta.org **Table #L3**

Since 1984 SMTA has been dedicated to sharing practical knowledge in the electronics manufacturing industry. It is an international network of professionals dedicated to skill-building, sharing practical experience, and developing solutions for electronics manufacturing. This includes expertise ranging from component manufacturing to system-level integration, encompassing microsystems, emerging technologies, and related business operations.



Southern Marketing Associates
www.smainc.net **Table #10,11**

Professional and highly technical representation (approx. 20 manufacturers) of electronic test equipment for use in design and testing efforts. Territory includes eastern Pennsylvania, southern New Jersey, Delaware, Maryland, DC, Virginia, North and South Carolina, Tennessee, Georgia, Alabama, Mississippi, Florida and Puerto Rico.

Silver Sponsor



Specialty Coating Systems

www.scscoatings.com

Table #32

SCS is a world leader in Parylene, liquid, plasma, ALD and multilayer conformal coating services and technologies with 21 worldwide locations and over 50 years of experience. SCS conformal coatings offer excellent moisture, chemical and dielectric barrier protection to components in the electronics, medical device, automotive, defense and aerospace industries.



StaticStop a Division of SelecTech

www.staticstop.com

Table #37

StaticStop, a division of SelecTech, Inc, is a leader in static control flooring. We offer the most complete line of ESD Flooring solutions, including conductive glue-down tile, resinous flooring, carpet, rubber, and our proprietary interlocking flooring systems. Our environmentally friendly ESD products offer total protection for sensitive products and procedures.



Stephen Gould

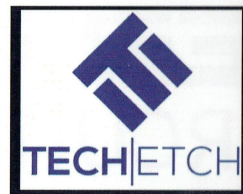
Stephen Gould

www.stephengould.com

Table #91

Stephen Gould is full solution packaging company offering custom packaging design for a full range of retail and industrial products. From start to finish, our team consults with you on the design, material selection, and manufacturing processes to ensure a streamlined product development so your goes to market with confidence.

Bronze Sponsor



Tech Etch

www.techetch.com

Table #2

We're an etching company by trade but we also support laser cutting and stamping along with a number of other manufacturing techniques. Our 3 product lines are flat and formed metal parts, flex and rigid flex circuits and EMI/RFI shielding components.



Technical Materials Global

www.TechMatGlobal.com

Table #86

Technical Materials Global is a supplier of made-to-print PCBs, metal and plastic components, and wire harnesses. Founded in 1992 we have supplied electronic OEMs and contract assembly companies throughout the US, Canada, and Mexico. We partner with our CEM customers, forming partnerships that grow both our businesses.



TELEDYNE LECROY

Everywhere you look™

Teledyne LeCroy

www.teledynelecroy.com

Table #28

Teledyne LeCroy is a leading provider of oscilloscopes, protocol analyzers and related test and measurement solutions that enable companies across a wide range of industries to design and test electronic devices of all types. Since our founding in 1964, we have focused on creating products that improve productivity by helping engineers resolve design issues faster and more effectively.

Silver Sponsor



TFS Inc.

www.tfs-pcba.com

Table #77

TFS, Inc. is a custom electronics design company and manufacturer. Through the years of successful production of our own product, we've expanded into offering a wide array of contract manufacturing options including electronic assembly, box-builds, turn-key solutions, cable assemblies, and custom over-molded products. Our success is driven by technology, innovation, our experienced staff, and our continued commitment to customer satisfaction.

Silver Sponsor



Leading With Quality in Test Engineering Since 1980

The Test Connection, Inc.(TTCI)

www.ttci.com

Table #4

The Test Connection, Inc. is an ISO, ITAR, JCP2345 company offering test engineering support since 1980. TTCI provides flying probe, in-circuit, and functional test development on; Seica Pilot V8, Digitaltest Condor, Keysight (Agilent) 3070 or Teradyne TestStation systems. TTCI offers boundary scan test using JTAG or Keysight (Agilent) X1149. Ask about our DFT, DFM, Coverage Analysis with TestWay Express and flying probe test services. Ask us about The Training Connection LLC.

Silver Sponsor



Totek International

www.totekinternational.com

Table #49

Totek International Co., LTD – Your Trusted Partner in Wiring Harness Innovation. With over a decade of Research and Development expertise, Totek International Co., LTD is a global leader in custom wiring harness and cable assembly solutions. We deliver cost-effective, high-performance interconnect solutions for automotive, industrial machinery, medical, electrical, and communication sectors. We focus on turnkey solutions.



Transforming Technologies

www.transforming-technologies.com Table #38

Transforming Technologies offers a wide range of critically important quality control products to the technology and manufacturing industries. Our products are key tools used by industries to assure an effective ESD control program for protecting sensitive electronics from static and contamination. We specialize in: Grounding Products, Cleanroom Supplies, ESD Apparel, Ionizers, ESD Matting, Test and Monitoring Equipment.

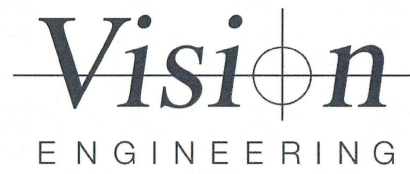
Bronze Sponsor



Valtronic Technologies

www.valtronic.com

Valtronic is a global full-service electronic medical device contract manufacturer with more than 40 years of experience in turnkey devices, microelectronic assemblies, and miniaturization. 80% of our activity is ISO 13485 / FDA registered Class I to III with Manufacturing Facilities in the USA, Switzerland and Morocco Special services include chip-on-flex, direct-die attach, die stacking and wire-bonding Offering Design Development, PCBA, Box Build and Depot Service / Repair.

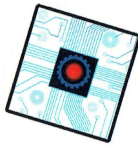


Vision Engineering

www.visioneng.us

Table #47

Whatever the task— goods in, final inspection, component identification, electronics assembly, fault detection, documentation, and more –Vision Engineering's ergonomic stereo and digital microscopes make your job easier. With high quality optical and digital views, our systems improve accuracy and reduces operator fatigue, improving productivity and throughput.



Bronze Sponsor

wallace
electronic sales

Wallace Electronic Sales

www.wes-inc.com

Table #78

Wallace Electronic Sales is a manufacturer's representatives firm serving the Southeastern United States electronics market since 1935. We have offices in North Carolina, Georgia and Alabama. Our job is to offer consistent field support that builds strong customer and principal business relationships. Wallace strives to bridge the relationship between both parties, facilitating successful business partnerships with local support. We care. We listen. We bring solutions. Website: wes-inc.com



Wireless Research Center

www.wrc-nc.org

Table #84

WRC Technologies is a leading provider of strategic engineering services for wireless technology. We specialize in the design, simulation and testing of antennas, RF devices, wireless networks and system architectures. Our top-tier engineering and ISO-accredited testing services are tailored to each client's needs. As a nonprofit, WRC is IP-neutral and able to bring ideas to market faster and more cost effectively. WRC delivers innovative wireless solutions from initial concept to production.



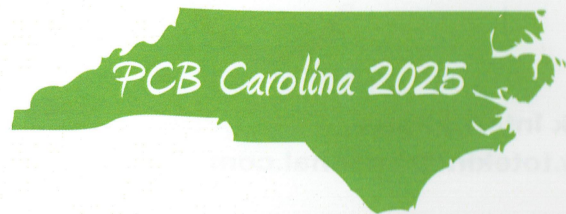
Bronze Sponsor

WDL Systems

www.wdlsystems.com

Table #7

WDL Systems in Pittsboro, NC, has 35 years of experience distributing products for AI, Industrial IoT, and Edge Computing applications. We are proud to exhibit with ADLINK, a global company that has set industry standards for computer-on-modules for more than 25 years. Explore our complete line of computer-on-modules, single board computers, industrial computers, industrial networking devices, wireless communication modules, industrial memory products, and products for test and measurement.



**Thank you to all the Sponsors, Exhibitors,
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See you in 2026!

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Control Without Complexity

Electronics product and systems
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Altium.
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Unlimited Power to Create

Multidisciplinary product creation
powered by the strength of an
unconstrained, connected network.



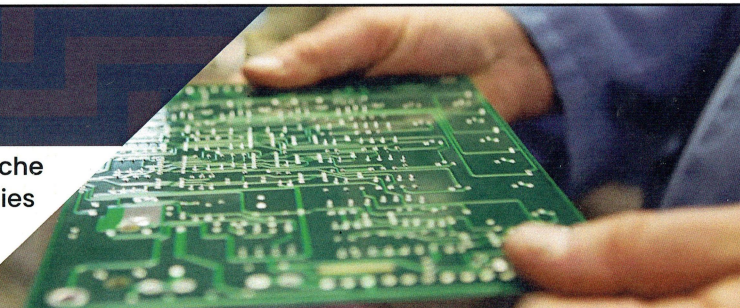
RBB is here to help manufacturers eliminate the headache caused by their complex printed circuit board assemblies (PCBA) and control panel projects.

Specialists in Custom Circuit Board Assembly

- Circuit Board Components Sourcing
- PCB Assembly
- Control Panel Assembly
- Visual Inspection & Testing
- On-Time Delivery

RBB always aims to exceed our client expectations.

At RBB, we go beyond top-notch PCB assembly, custom circuit boards, and control panel solutions. Our commitment to quality and client satisfaction has earned us industry recognition, but we believe trust and dedication are just as important. We're not just a vendor, we're a partner dedicated to your success.



A Custom Circuit Board Assembly Process, Exclusively Optimized for Your PCBA Needs.

Regardless of job size, you will see the many benefits of our 50 years of industrial control panel and PCB assembly expertise.

Step 1: Start the Conversation - We get it right from the start.

Step 2: First Job - Our dedicated staff delivers flawlessly, on time, the first time.

Step 3: Recurring Jobs - Recurring orders in high demand are our sweet spot.



Visit us at Booth 61

50
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Phone: 330-567-2906

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- » Thermally Conductive
- » Thermal Shock & Vibration Management
- » High & Low Tg Materials
- » RF Friendly Materials ((∞))
- » Many product certifications: (UL)



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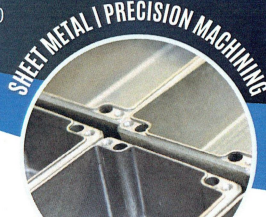
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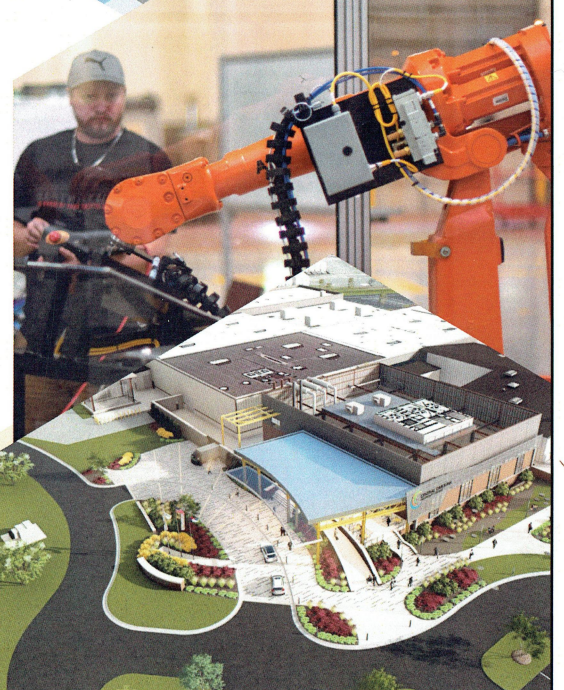
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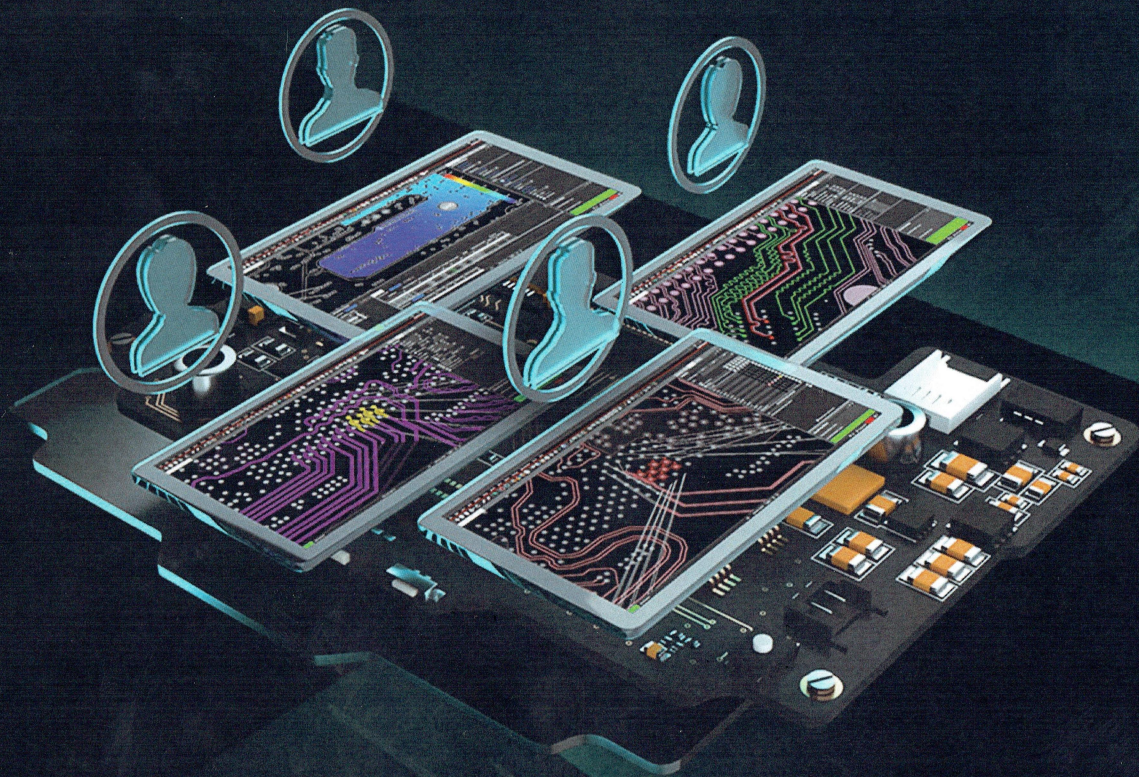


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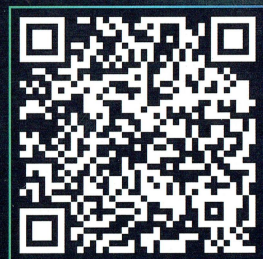
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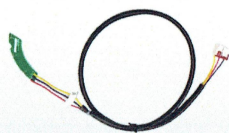
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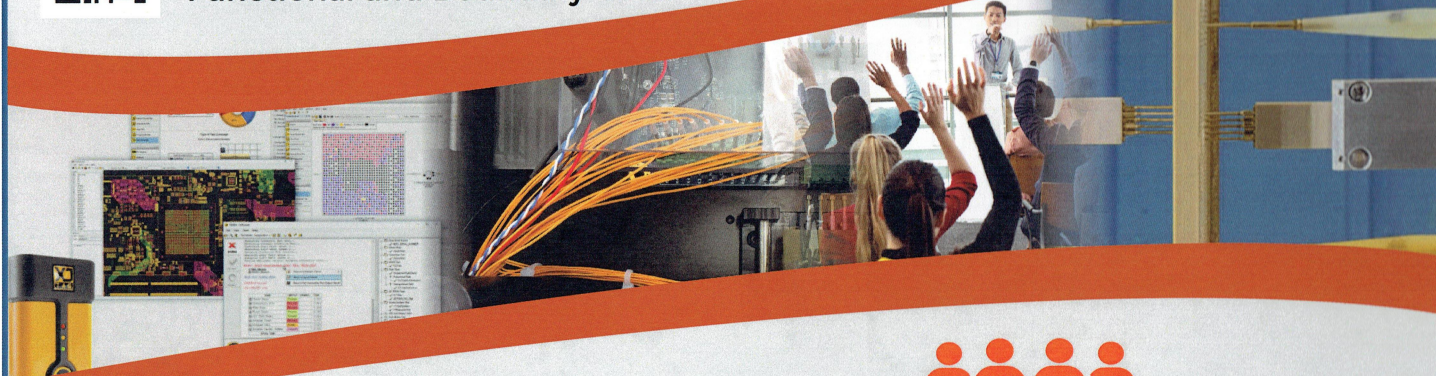


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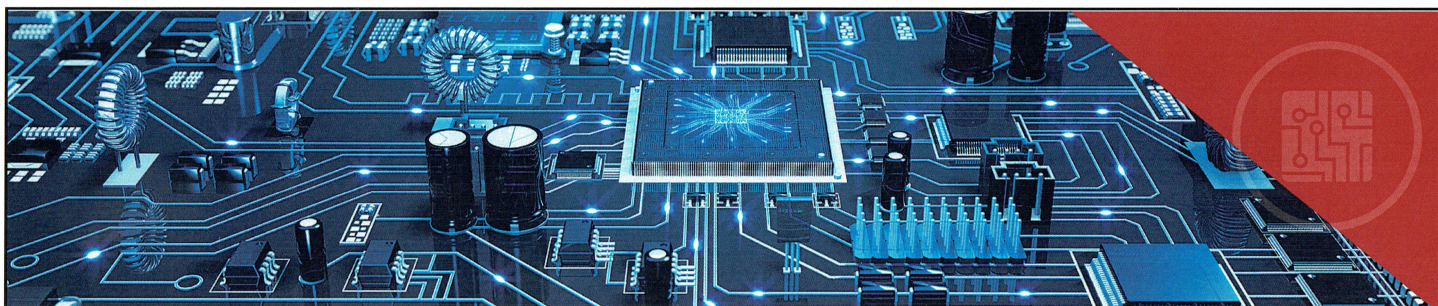
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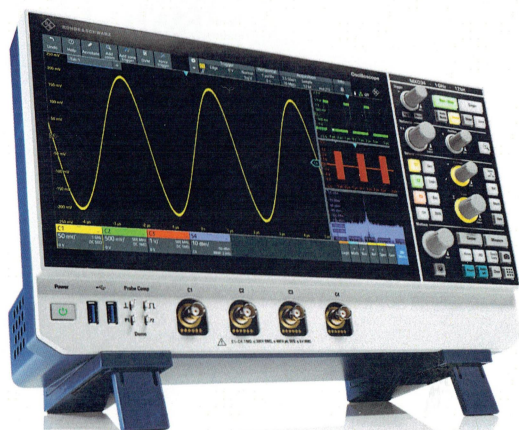
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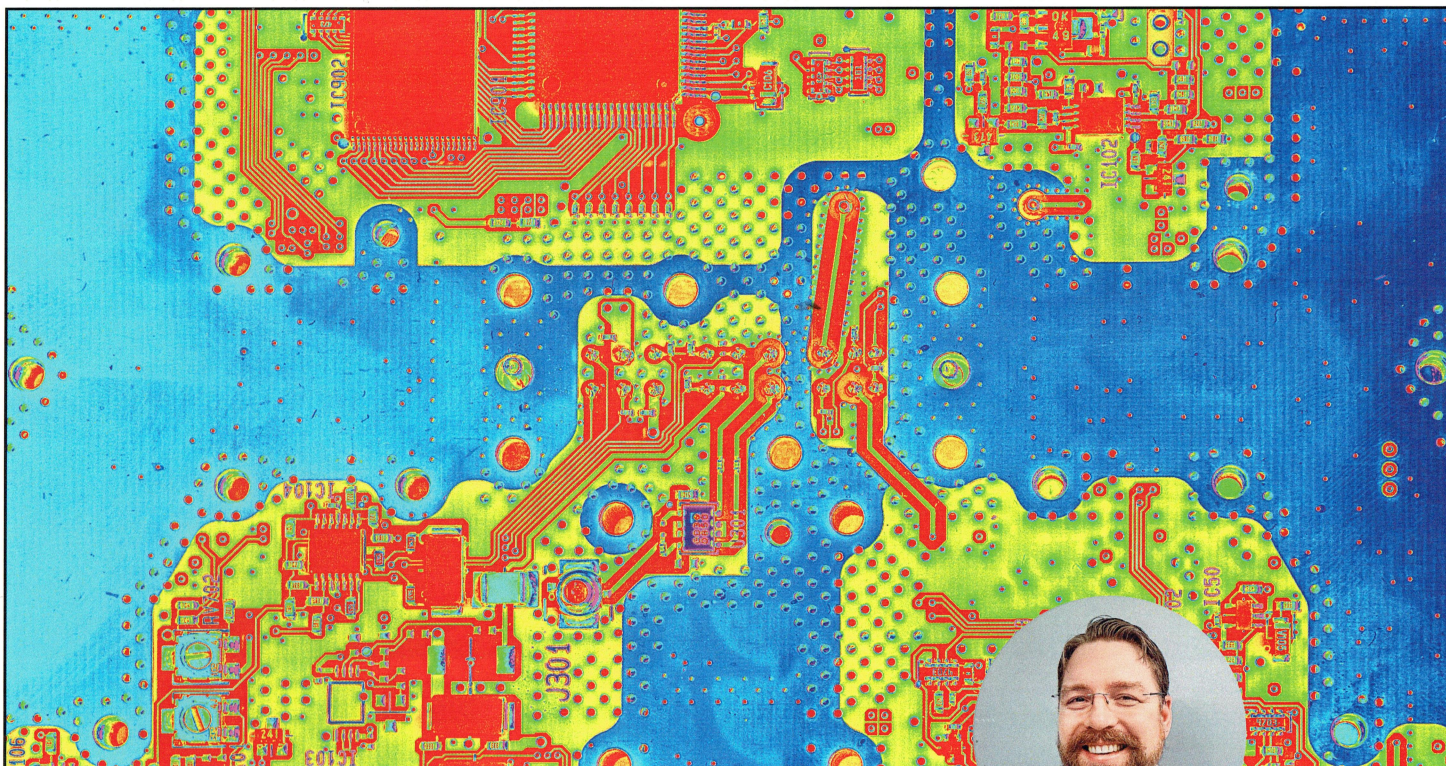
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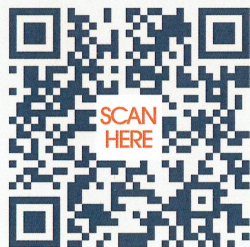
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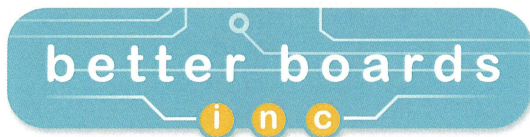
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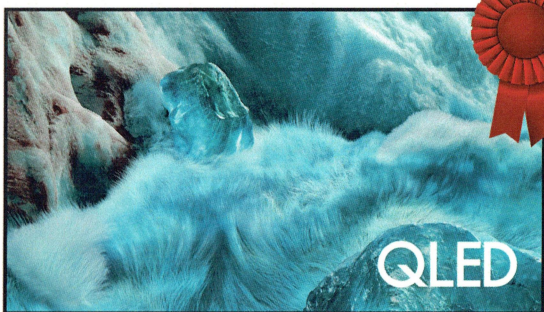
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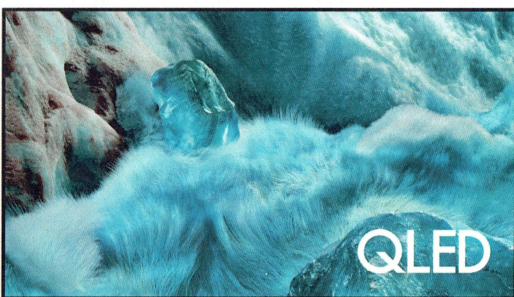
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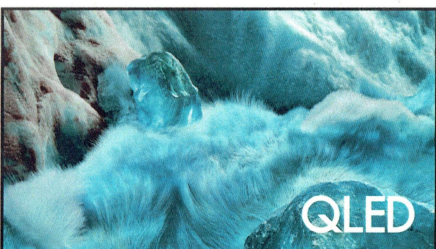
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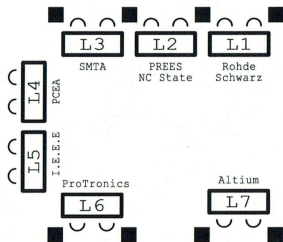
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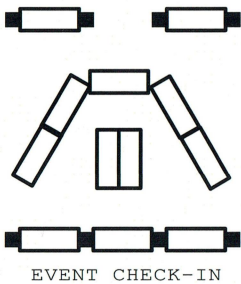
LUNCH

EVENING RECEPTION

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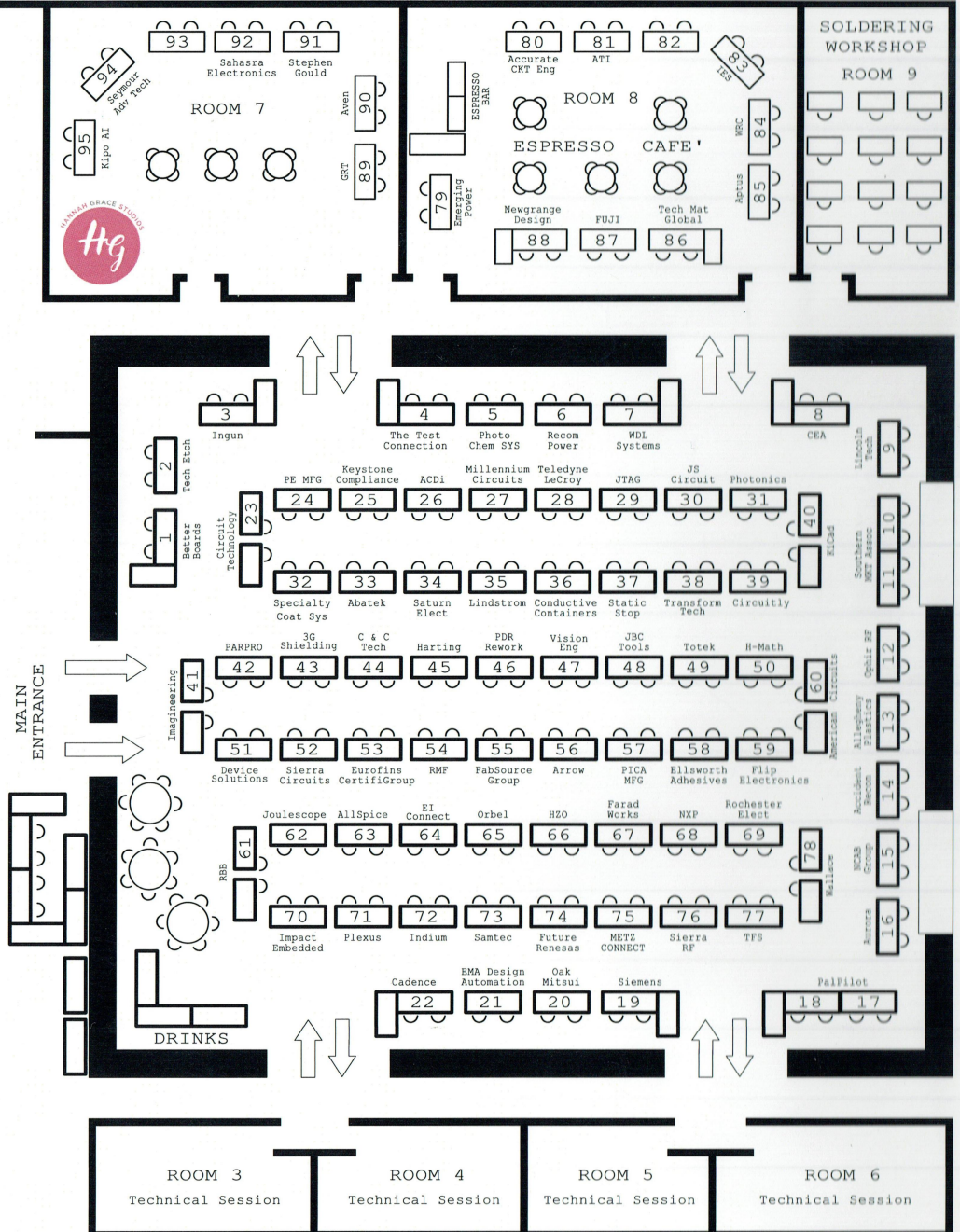
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